FEDERAL AGENCY ACQUISITION MANAGEMENT

HEARING

BEFORE THE

COMMITTEE ON GOVERNMENTAL AFFAIRS UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

SECOND SESSION

ON

S. 2397

TO REQUIRE (1) THE ENACTMENT OF SPECIAL LEGISLATION TO CONTINUE THE EXPENDITURE OR OBLIGATION OF FUNDS ON ANY MAJOR CIVIL ACQUISITION INITIATED AFTER JANUARY 1, 1982, WHENEVER THE COST OF SUCH ACQUISITION HAS INCREASED OR, ON THE BASIS OF ESTIMATES, WILL INCREASE OVER THE INITIAL ESTIMATE WHEN THE PROJECT WAS JUSTIFIED TO THE CONGRESS BY 25 PER CENTUM OR MORE, AND (2) REPORTING OF STATUS INFORMATION ON ALL MAJOR CIVIL ACQUISITIONS

APRIL 22, 1982

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FEDERAL AGENCY ACQUISITION MANAGEMENT

THURSDAY, APRIL 22, 1982

U.S. SENATE,
COMMITTEE ON GOVERNMENTAL AFFAIRS,
Washington, D.C.

The committee met at 10:03 a.m., in room 3302, Dirksen Senate Office Building, Hon. William V. Roth, Jr. (chairman of the committee), presiding.

Present: Senators Roth, Cohen, Levin, and Eagleton.

OPENING STATEMENT OF SENATOR ROTH

Chairman ROTH. The committee will please be in order.

Today, we convene to consider legislation I have introduced designed to provide better mechanisms to curb the continuous cost growth which has plagued, frankly, both major civilian acquisitions projects as well as defense projects.

The legislation, entitled the Cost Reduction in Major Procurements Act of 1982, sometimes called the CRIMP Act, would lay the groundwork for a more uniform, consistent, and visible cost reporting system for major Federal civilian acquisition projects. It would insure that the public and the Congress is no longer left in the dark about cost overruns in these projects.

The recent study by the General Accounting Office is shocking in its findings. It clearly indicates that the amount of overruns in the civilian agencies is every bit as bad, if not worse in many cases, than the Department of Defense. Frankly, one of the reasons the American people have lost confidence in Government is that they don't see it being efficient and they are outraged by the continuing cost overruns. Much attention has been focused in the past as to defense overruns which we will also concentrate on today, but it is outrageous that it is happening in the civilian agencies as well.

We have some illustrations on the charts to my left. This chart shows that the average cost growth per project surveyed by GAO has increased from approximately $253 million in 1975 to a figure more than double amounting to $580 million in 1981.

I was dumbfounded when I saw the dimensions of these overruns. For example, the GAO report shows that the Department of Defense in 137 projects, where the original cost was supposed to be $184 billion, costs went up to $243 billion, that is an increase of 132 percent over the initial cost. We see the same pattern repeated in the civilian agencies.

Another example is the case of TVA, where in 10 projects, the original cost was estimated to be $3.5 billion and rose to $6.4 billion, an increase of 457 percent.

The Department of Interior has shown an increase of 173 percent in 22 projects. I might point out that the congressional branch of Government hasn't been much better. We found that the two projects being handled by the Architect of the Capitol, have had an increase of 118 percent. It is very clear that costs are out of control and it concerns me that we have not established adequate management controls within the Government.

What we are talking about today is what kinds of steps, or what measures can we take to begin to have a better handle on cost overruns. I will say, that some of the measures the Department of Defense is taking are at least setting up the right controls even though they are not working as well as we would like.

My legislation would create a standardized system to report the status and progress of major civil acquisition programs. It would also require OMB to report to the Congress any cost growth overruns in excess of 25 percent. As in the case of the Nunn amendment in military procurement, funding would stop at that juncture unless Congress passed special legislation to proceed.

I will insert in the record at this point my statement and the statements of Senator Pryor and Senator Sasser.

[The statements follow:]

STATEMENT OF SENATOR WILLIAM V. ROTH, JR.

Today, the Committee convenes to consider legislation I have introduced designed to provide better mechanisms to curb the continuous cost growth which has plagued major civilian acquisition projects. The legislation, entitled the "Cost Reduction in Major Procurements Act of 1982" (CRIMP Act) would lay the ground work for a more uniform, consistent and visible cost reporting system for major federal civilian acquisition projects. It would ensure that the public and the Congress is no longer left in the dark about cost overruns in these projects.

The Committee will also consider a major new GAO report which indicates that cost overruns continue to be a critical problem, spinning wildly out of control. The cost overruns cited in this report, if laid out in dollar bills, end-to-end and side-by-side, would entirely cover the counties of Sussex and Kent in my home State of Delaware. That kind of astroturf we don't need.

The legislation I have introduced will help curb cost overruns. It results in part from an important series of hearings my Committee held last year concerning the managment of major systems acquisition in the Defense Department. One of the issues examined by the Committee during these hearings was the question of how cost overruns occur, how such overruns are reported to the Congress and explained to the public, and what role Congress can play in assuring that serious cost problems are brought under control before too many taxpayer dollars are wasted.

The Committee heard testimony that the current cost reporting system to Congress on major defense acquisition projects, known as the Selected Acquisitions Report, or SAR, is inadequate and in fact makes proper oversight of acquisition programs very difficult. Witnesses testified that data on the SARs is often out of date and that potential cost growth on many programs could have been identified much earlier. Information was presented to the Committee which indicated that many major DoD acquisition projects do not appear on the SARs until years after the point at which the Congress can realistically take action to curb excessive costs. For example, nearly 140 programs were reported to the General Accounting Office this year as acquisition programs despite the fact that only 44 of these programs appeared on the SARs report to Congress.

The Committee also heard testimony concerning the accuracy of the cost estimates which are provided to Congress by DoD. One of the noted experts appearing before the Committee, Mr. Norman Augustine of the Defense Science Board,

acknowledged that DOD's cost estimates are far too often inaccurate and even misleading. As Mr. Augustine noted:

"The evidence I have gathered over a long period of years shows the chanees of a major program being completed within its initial cost estimate is about nine percent. This is after the effects of inflation have been eliminated and after adjustment for changes in procurement qualities actually made compared to quantities upon which original cost estimates were based."

A share of the cost overrun problem can clearly be attributed to inaccurate cost estimates and, in some cases, deliberately low cost projections which will allow the service involved to "buy-in" on a particular program and make up the loss later.

As flawed as the cost reporting system for DoD acquisitions is, at least there is such a system in place and in use in the Defense Department. No such system exists for major civilian acquisitions, despite the fact that serious cost overruns are occurring in those agencies, in some cases rivaling those which are routinely reported by DoD. For example, this year GAO reported that some civilian agencies had cost growth in their major acquisitions of over 100 percent. This parade of the uncontrollables includes the Corps of Engineers, the Appalachian Regional Commission, the Department of the Interior and our own Architect of the Capitol. Honorable mentions include the Departments of Energy and Commerce and the Veterans Administration. DoD obviously does believe in competition because it is clearly not monopolizing the field when it comes to cost overruns.

It seems that the general assumption among the agencies is that cost overruns can't exist if the necessary data is nowhere to be found. The Congress not only has a need but the duty to know how public funds are being managed. If uniform, consistent and easily understandable data on costs for major acquisitions is not provided to Congress, our crucial role in effectively overseeing and approving federal expenditures is carried through in form only and not in substance. Top level federal appointees, who come and go with successive administrations, cannot be expected to know how well their programs are administered unless they have access to accurate data accumulated on ongoing projects by past administrations.

Cost overruns don't just happen. They are allowed to occur through bad management, ineffective cost estimating and lack of accurate and visible information. It's time to shine the spotlight on the very cracks and crevices of the agencies and ensure that cost data on major acquisition programs is available to the Congress and the public.

I welcome our witnesses here today.

Opening Statement of Senator Pryor

Mr. Chairman, I would like to commend you for scheduling this hearing today which will examine cost growth in major acquisitions. Government procurement constitutes such a major portion of annual government spending that it is imperative that we, the Congress, know how these funds are spent and why projects so often cost more than Congress is told that they will cost. Overruns, and unnecessary spending, reflect poor government management controls and deprive the government of the resources which are necessary, especially today, where every dollar must count.

Contracting is no longer the minor agency function it once was. When Congress examines agency budgets, however, it often looks more at programs than projects. We get careful estimates of personnel and entitlements but inadequate information on acquisition costs.

Inaccurate estimating, cost overruns, and inadequate reporting are symptomatic of serious management problems. And I fear that without immediate attention to these problems the taxpayer will suffer a much greater loss of dollars.

Mr. Chairman, the witnesses brought together today should provide a meaningful first step towards the recognition of these and related problems, and the direction needed to bring this area of spending under control. I am especially pleased that the General Accounting Office and the Congressional Budget Office will testify today. The objectivity and thoroughness of their efforts have benefitted the Congress immeasurably in the past, and I'm sure will today as well.

Thank you.

OPENING STATEMENT OF SENATOR SASSER

Mr. Chairman. I congratulate you on introducing S. 2397, the "Cost Reduction in Major Procurements Act of 1982"—known as the "Crimp" Act. I am very pleased to participate in today's hearings.

It is certainly "high time," as we say down in Tennessee, for the Congress to put a lid on the wildly escalating cost overruns for Government projects. As of September, 1981, the General Accounting Office reports we were spending $317 billion more Federal dollars on 376 projects underway than the initial budgetary estimates presented to Congress indicated the projects would cost. In other words, there was a 140 percent increase in the aggregate cost of those 376 projects.

Agency-by-agency, the GAO report on the "status of major acquisitions," just released today, indicates that as of September 31, 1981, major projects in the Department of Defense cost 132 percent more than originally estimated. Major projects at the Deaprtment of Interior cost 175 percent more than expected. And projects under the Architect of the Capitol cost 118 percent more than anticipated.

We need to put a "crimp" in this kind of cost projection. If S. 2397 passes, then the Congress will have the tools it needs to do just that.

For one thing, we will have better information on cost escalation over budget from the agencies themselves. The Federal agencies are not required to report this kind of information today. Then, we can tell whether the cost overruns for particular projects exceed a reasonable limit. If they do, then the project would stop unless the Congress reauthorized it.

One of the major problems the Congress has in using cost estimates initially submitted in approving Government projects is "low balling." The cost is underestimated initially for some reason. Then, after the Congress has taken the "bait", there are annual increases in cost over the original estimate.

The original underestimation may be due to a variety of factors. Inflation may not have been taken into account, or there may be unavoidable delays either in the progress of the construction or in funding. Probably there are only a few instances where the "low balling" is deliberate, just to get an expensive project underway.

Whatever the reason, though, we just cannot allow it to continue. We need to examine unreasonable cost escalation for Government projects. If we can't get better estimates, then we are simply not doing an adequate job of watching the Federal dollars we are spending.

Mr. Chairman, I look forward to participating in this hearing today and to working with you to obtain rapid passage of S. 2397.

Chairman ROTH. I want to welcome our witnesses here today. I think this is an extraordinarily important hearing, and I am happy to welcome my colleague, Bill Cohen.

Senator COHEN. Thank you, Mr. Chairman.

I will be brief and ask that my prepared statement be inserted in the record.

Chairman ROTH. Yes.

OPENING STATEMENT OF SENATOR COHEN

Senator COHEN. I want to commend you for holding these hearings and for introducing legislation to control cost growth in defense and civilian procurements. We have been through this before with respect to the Defense Department in hearings that you organized last year. What we found during the course of those hearings is that everybody seems to be buying into the system.

Contractors in the defense field have been buying into the system by deliberately underestimating the costs of weapons systems. DOD has been buying into the system by being forced, through OMB directives, to underestimate inflation figures. And then what happens? We have a dramatic increase in the costs, a doubling, as the chairman has suggested, in many cases.

Sometimes it is much greater than that. Last year we found out, for example, that during the last 3 months of 1980, out of the 47 weapons systems, there was a cost growth of in excess of $47 billion—all the money that we had saved through the President's budget request for the last fiscal year. So we have buying in by the contractors, buying in by the agencies, and we have in essense the taxpayer buying out when he is presented with the bill.

We have legislation that requires truth in lending, truth in advertising, but we don't have any legislation that deals with truth in procurement or truth with respect to acquisition.

The second part of our problem is not only do we not find out what programs are really going to cost before we are required to authorize and appropriate dollars to pay for them, but we find out too late.

We have no idea, especially in the civilian sector, as to what the cost growth is until it is too late. At least, as the chairman has hinted at in the Defense Department, we have the quarterly selected acquisition reports. The problem with those reports is that they are complex and for some they are incomprehensible. I quote from Gen. Kelly Burke who made the statement with respect to the SAR's: "I don't understand them. I don't know anybody that does."

Well, if he doesn't understand, woe be unto us, who are lay men and women with no training in understanding SAR's. How do we find out? We are the people who are supposed to be investigating, scrutinizing, trimming budgets whenever we can and if we have an expert in the field saying he doesn't understand them, then what do we do?

So I would commend you, Mr. Chairman, for trying to institute some sort of rationale procedure that, No. 1, gives us a realistic projection of the cost of the programs and, No. 2, sets up a mechanism whereby we can monitor to some degree the kind of cost growth that is inherent in Federal programs.

[Senator Cohen's prepared statement follows:]

PREPARED STATEMENT OF SENATOR WILLIAM S. COHEN

Mr. Chairman, I am pleased that you have convened this hearing to examine cost growth in Federal acquisitions. While the problem of cost overruns in defense weapons systems has been well documented, Congress has rarely paid attention to the similarly explosive growth in cost of the acquisitions of civilian agencies. This hearing will provide us with the opportunity to examine the causes of—and seek solutions for—excessive cost growth in both civilian and defense acquisitions.

The fundamental cause of cost growth, in my judgment, is inaccurate cost estimating. Contractors hoping to win a bid too often knowingly understate the cost of performing a service or providing a product, intentionally "buying-in" with the knowledge that modifications or follow-on contracts will make up the initial loss. Federal agencies, in turn, provide Congress with overly optimistic cost estimates in order to win approval and appropriations for the projects. Unfortunately, it is the taxpayer who gets stuck with the eventual inflated bill.

Congress should not have to second-guess agency estimations to try to figure out what will be the true cost of the acquisition—whether it is an advanced satellite system or a small flood control project. That is what is happening now. The General Accounting Office report released today indicates that the cost of 376 Federal projects increased more than $317 billion over the estimates provided to Congress in the initial budget justifications. These budgetary sleights of hand must be stopped. "Budgeting to most likely cost" should not be a slogan, but a reality for all Federal agencies.

The second problem is that Congress learns too late, if at all, that a project is experiencing excessive cost growth. By the time that Congress realizes that a severe problem exists, it is often too late to do anything but pay the bills.

The Defense Department does provide Congress with information on cost growth in its major weapons systems through quarterly selected acquisition reports. But the SAR's usefulness is limited by its complexity. General Kelly Burke best summed up the SAR when he recently admitted:

"I don't understand them, and I don't know of anyone who does."

Whether the SARs are incomprehensivle by accident, as General Burke suggests, or by design, improvements are surely needed so that Congress has a better knowledge of why and when the cost growth occurred.

Although the limitations of the SAR are considerable, at least a reporting requirement for the Defense Department acquisitions exists. Currently, there is no similar reporting requirement to provide cost, schedule, and quantity data on major civilian projects, which is one reason their cost growth is often overlooked. The Chairman's proposal to require civil agencies to periodically report on their major acquisitions would enable Congress to more easily identify problem projects.

I look forward to questioning our witnesses today about other possible ways to strengthen the reporting system and to improve cost estimating.

Chairman ROTH. Thank you, Senator Cohen.

Senator Levin.

OPENING STATEMENT OF SENATOR LEVIN

Senator LEVIN. Thank you, Mr. Chairman.

Let me join Mr. Cohen in commending you, first of all, for your continuing strong efforts in this area. They are essential. I have a few brief remarks as we begin this hearing today. It seems to me that there is one recurring theme that we have heard at the hearings we held last year on DOD procurement and will be hearing today from the GAO on how to contain cost growth in major Government acquisitions and that is that the Congress has to know more both at the time it makes its initial decision to approve these major acquisitions and as the development of these systems or projects proceed.

That is what the GAO recommendations are all about in the report being released today, that is what Senator Roth's draft bill which was recently circulated in connection with what this hearing is all about, and that is what Senator Nunn's amendment in last year's Department of Defense authorization bill was all about.

We must have the best available, contemporary data on the cost of a system so we can decide whether it is worth it to continue our support for it or whether the taxpayer is going to come out on the losing end.

But it is clear that the contracting agencies too often either don't seem to know what is happening in terms of the cost growth of their major projects—and that is evident from the lack of available data reflected in the GAO report—or, if they do, they don't want Congress to know out of fear, I presume, that the Congress will decide to terminate a particular program. But that is precisely what we must be able to do at the earliest possible stage and at each stage thereafter if the real evidence compels that decision.

We cannot be ostriches around here when it comes to talking about billions of dollars. We have to know what we can expect a particular system to cost, how much it will set the Federal Treasury back so that we can balance our choices and priorities.

It is not enough to know the cost, as important as that is. In addition, Mr. Chairman, we must be able to act on the information that we

have. And we need to be able to act promptly to terminate a program when we find out that its costs outweigh the benefits.

I will be offering an amendment to this effect in this year's Department of Defense authorization bill. It will require that at the time a unit cost of a major DOD acquisition increases cost over 15 percent in 1 year, the GAO must review that program within 30 days to determine the reason for the cost growth.

So far that is what we have in the law with the Nunn amendment. That is the reporting requirement which is so critical. But this amendment would go beyond that. This amendment will allow, then, the two Armed Services Committees of the two Houses of the Congress to review the program; it would give them 30 days to review the GAO report and, if they wish, to terminate the program.

Mr. Chairman, there is, I am sad to say, a pending excellent example of the situation where the Congress does not have relevant cost data and that is the B–1 bomber.

We are talking, here, about a program which is estimated by Secretary Weinberger to cost some $20 billion. Over 7 months ago, we were told there were some very solid cost estimates within the Department of Defense which suggested that the cost of the B–1 would be in considerable excess of $20 billion. The Pentagon's cost analysis improvement group—or CAIG—allegedly estimated the cost to be somewhere in the neighborhood of $27 billion and the Air Force's independent cost assessment—the ICA—also allegedly indicated an estimate significantly above $20 billion.

Now, that is very important information for this Congress.

We are the decisionmakers on these major acquisitions, and we need that information, and yet the Department of Defense has yet to make these documents available and has declined a formal request by the General Accounting Office to have access to them.

I have requested, Mr. Chairman, that these documents be brought to the hearing today, and I'll be anxious to hear what the witnesses from the Department of Defense have to say relevant to those estimates.

Mr. Chairman, again, indeed, this hearing is timely and, again, I want to commend you for directing our attention to this critical budgetary issue.

Chairman ROTH. Thank you, Senator Levin.

We have as our first witness, Mr. Walton Sheley, the Director of Mission Analysis and Systems Acquisition Division of the U.S. General Accounting Office. Mr. Sheley, we would ask you to proceed with your testimony and if you will introduce your colleagues.

TESTIMONY OF WALTON H. SHELEY, JR., DIRECTOR, MISSION ANALYSIS AND SYSTEMS ACQUISITION DIVISION, GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY LESTER FARRINGTON, GROUP DIRECTOR, AND GERALD PAYNE, GAO EVALUATOR

Mr. SHELEY. Thank you very much.

On my right is Les Farrington who is a group director and on my left, Mr. Gerald Payne, staff evaluator. These two gentlemen were primarily responsible for preparing the report that you referred to in your opening remarks. I am very pleased to be here today to present the GAO's position on the causes of cost growth, its impact, and what needs to be done to bring it under control.

I will also discuss the proposed bill, S. 2397, which would establish a requirement for civil agencies to report to the Congress on the status of major acquisitions and what GAO has done to improve upon the integrity and usefulness of information provided by the Department of Defense, to the Congress in its selected acquisition reporting system.

As you know, GAO, as part of its continuing efforts to keep the Congress apprised of the cost and progress of Federal acquisitions, annually reports the latest available financial status of major projects. This practice began in June 1976 when GAO issued its first combined civil and defense major acquisition status report. It showed that through fiscal year 1975, 585 acquisitions had cost growth of $148 billion, an average of $253 million per acquisition. Our current report, which bears today's date, shows 465 acquisitions had realized cost growth of $257.5 billion. an average of $553.8 million per acquisition, more than twice that of 1975.

GAO believes that better reporting is an essential first step to controlling cost growth. I hope this hearing will give impetus to that undertaking.

There is no one present who does not firmly believe that new major acquisitions, either for the civil sector or DOD, entering the acquisition process today, will experience significant cost growth production is completed. It is an undeniable fact that significant cost growth will occur on every new system that enters the acquisition process unless management resolves to take the logical measures available to correct the situation.

Volumes of materials have been written on the subject of cost growth during the past 10 years. Unfortunately. cost growth is still with us, and it is well past the time for some serious efforts to be made to put existing and new machinery into action.

The matter of cost growth on Federal acquisitions is a complex problem involving economics, budget priority decisions, political decisions, and program and project management policies and practices. I think it is important to recognize early on that factors accounting for cost growth are generally interrelated and will vary in importance depending on the type of acquisition being analyzed.

It is also important to recognize in any analysis or discussion of cost growth that not all cost growth can reasonably be prevented. For example, unusual periods of inflation may result in cost growth. Also, some cost growth, even though preventable, may be necessary to achieve maximum benefits in a particular program. Changes in technology make it possible to incorporate modifications that result in an overall increase in the effectiveness of the acquisition. Such cost growth cannot always be anticipated, particularly when the acquisitions cover long periods of time.

But for the most part, cost growth can be controlled. The facts argue that the Government has, in fact, made some progress in developing a greater capability to make accurate cost estimates, but this progress has not often been put to good use. Today, DOD recognizes control of cost growth as one of its major problems and has directed specific initiatives to get it under control.

The most essential ingredient to avoid growth is, at the very outset of a program, to be honest in preparing and reporting the cost estimates. There are many other reasons for cost growth, including: Stretching

out procurement schedules; deferring procurement of a system; unanticipated technical problems; inflation; underestimating technical complexity; increasing capabilities of the system; and other issues generally associated with failure or inability to follow established acquisition principles.

Cost estimating is the key ingredient in reducing cost growth because it transcends all of the causes identified above. Typically, cost estimates involve an initial estimate followed in a few years by a development estimate. The Congress gives its approval based on the initial estimate. Therefore, this estimate should be the best early projection that an agency can make after having considered all pertinent factors.

Too often, however, it is nothing more than a rough feel for the potential cost of a project. In many cases, optimistic estimates are used to gain approval of programs. Once Congress has accepted and authorized such programs, it becomes very difficult to terminate them. The development estimate is a refinement of the initial estimate after some degree of project definition work and is usually made at about the time the development contract is awarded.

As far back as the early 1970's, GAO has reported that both initial and development cost estimates on Federal acquisitions in many cases are quite optimistic on technical development problems, cost, and potential performance. Recognizing the technical complexity of research and development projects, GAO believes it is extremely important that adequate project definition be performed to provide as accurate and reliable an estimate as possible of schedule milestones and total project cost.

The desire of program advocates to sell the program to both agency management and the Congress with low cost estimates and high expectations for solving technical problems is understandable. After all, the vitality of an agency depends largely on new program starts. However, this must be balanced against the need for as realistic appraisals as possible of the potential resources needed. One key improvement needed is more candor up front in the initial presentation of programs to the Congress and not promising more than can be realistically delivered.

The major problem with this consistent pattern of underestimation is that the Congress is being placed in an untenable position. The Congress has to make choices and decide for itself what the spending priorities should be. Without good cost estimates, the Congress is making major decisions in a vacuum. GAO believes that agency management and the Congress must have reliable estimates to make informed decisions about initiating, continuing, modifying, and canceling projects.

The use of optimistic inflation rates in developing cost estmates also accounts for considerable cost growth. Whereas, DOD includes inflation in all of its estimates, civil agencies have not followed a uniform practice. For those acquisitions in which inflation is included, the low rates used to project inflation for the duration of the acquisitions have consistently resulted in underestimated project costs.

Estimating the rate of inflation is admittedly speculative and provides no guarantee of actual costs to be incurred, but the Congress should be aware that funds needed for dealing with future budgets and appropriations may be considerably more than the program estimates, as now drawn, would indicate.

In some cases, cost growth can also be aggravated because of the general uncertainty about funding. On weapon systems, the lack of sufficient production funding, for example, can inhibit the use of the most economical production rates. Planning optimism often meets the reality of limited funds available for a given number of projects. Program stretchouts or deferrals can likewise be a cause of cost growth.

Cost growth has proved to be particularly troublesome and despite much effort, the problem persists. There are some who would shrug it off as a bookkeeping/cost-estimating exercise or as a normal cost of doing business. Most, however, including GAO, view cost growth as a serious problem. Although GAO cannot address specifically its impact on the Nation as far as civil acquisitions are concerned, GAO is certain the impact is quite detrimental to our economy.

For defense acquisitions, it has direct and highly visible effects on our national security. Major cost increases contribute to the procurement of far fewer units of weapons than our military leaders say we need to maintain an adequate defense posture.

Because of cost growth, projects cannot be accomplished with the appropriated funds approved by the Congress. Unless additional funds approved by the Congress. Unless additional funds are authorized to cover funding shortfalls, projects can be adversely affected in terms of: reduction in scope and quantity; program stretchouts; reductions in areas such as testing, training, support, and so forth, to maintain program schedules; and reprograming of funds between acquisitions.

More difficult to address is the impact that the accumulation of poor estimates, on many programs over many years, does to the reputation of Government managers who work extremely hard to bring an acquisition program in within established cost, schedule, and performance estimates.

GAO recently provided your committee written comments on S. 1604, an earlier version of S. 2397. Basically, our comments are the same as the one prepared earlier for H.R. 4685, a bill proposed by the Government Operations Committee, House of Representatives. GAO is pleased to note that the current version of the bill encompasses the suggestions contained in our comments. As indicated in our written comments, we support the intent of the bill.

The proposed bill is an attempt to curtail cost growth on major civil acquisitions by requiring civil agencies to periodically report status information on major acquisitions. The bill also provides that when the cost of a major civil acquisition grows by 25 percent or more. no additional funds may be obligated or expended unless special authorizing legislation is enacted by Congress.

GAO believes the reporting of such information is necessary as a first step to controlling cost growth. In 1976, GAO reported on the need to require status reporting of major civil acquisitions. Currently, there is no single reporting system to provide cost, schedule, and quantity data on major civil acquisitions. However, the National Aeronautics and Space Administration does prepare status reports at the request of the chairman of the Department of Housing and Urban Development-Independent Agencies Subcommittee of the Senate Appropriations Committee. Such a system as proposed in the bill will provide the Congress and top agency management with oversight data

on the progress and direction of projects and allow them to readily identify possible problem areas and their causes.

In summary, we support the intent of the bill as it now stands. We caution, however, that a reporting system should not be viewed as a panacea. As with any new system, the bugs have to be worked out and that will take time. DOD's selected acquisition reporting system, although in existence for over a decade, still could be improved to provide better information on major system acquisitions. However, the first step to improving the management of any program is to insure that accurate information is made available to responsible agency officials and to the Congress. With that in mind, I would like to discuss the SAR system's past improvements and potential for additional improvements to make it a more useful source of information.

The SAR system provides useful information, on a quarterly basis, on the status and progress of selected major acquisitions. Through this system some visibility on weapon system cost and cost growth, as well as changes to schedule and technical performance data and reasons therefore, are provided to committees of the Congress. Just as important, the SAR system provides categories for recording specific causes of cost growth.

This type of data, accumulated over a period of years on a wide variety of systems, has provided a valuable insight into such growth. It is also useful in highlighting causes that can be corrected and the extent of growth due to other causes which are more or less beyond the control of a program manager.

Although the SAR system provides useful information, GAO believes it can be improved. GAO issued reports which contained recommendations to the Secretary of Defense to improve the reports provided to the Congress. DOD agreed with some of our recommendations and identified improvements which have been made; however it disagreed with several of our other recommendations. DOD takes the view that it is fully complying with the desires of the Congress and, therefore, does not intend to implement the other recommendations.

Since GAO is convinced that the recommendations would result in the Congress receiving information that would be valuable in carrying out its oversight responsibilities, GAO recommended to the Congress in a report dated March 2, 1981, that the Secretary of Defense be directed to change the SAR system. Our recommendation would require that the SAR system:

One, include important systems that are in advance development;

Two, expand the required mission capability assessment statement to describe shortcomings and limitations of systems in their expected operational environments;

Three, include planning estimates and a one-time variance analysis for the planning and development estimates in the first report that includes the development estimate;

Four, include a brief narrative section on technical and operational risks; and

Five, include cost estimates for categories of logistic support/additional procurement costs related to the weapon system such as modifications, component improvement, replenishment spares, industrial facilities/production base, simulators, consumables, and modification spares.

Adoption of these recommendations would go far in narrowing the credibility gap that is widely recognized by all the principal players involved in the defense community, including DOD. GAO hopes that these hearings may also lead to some action on these recommendations.

As you can see GAO has been deeply involved in systems acquisitions for many years with the ultimate goal of identifying ways management improvement might be made. Through the combined efforts of the Congress, the agencies, and GAO, progress is evident. But still more needs to be done.

At your request and also at the request of the chairman of the Senate Armed Services Committee, we are currently examining the unit cost exception reports required by section 917 of Public Law 97–86, referred to as the Nunn amendment, and the SAR system to identify where further improvements can be made. We will keep you appraised of our progress and report to you later in the year.

Mr. Chairman, this completes my formal statement. I would be pleased to respond to questions you or other members may have.

Chairman ROTH. Thank you Mr. Sheley.

One of my principal concerns is that it appears that cost control is just nonexistent in government. Looking at your findings, for example, in the case of the Appalachian Regional Commission, there is an increase of over 1,000 percent where a project jumped from $800 million to $8 billion. You have the Corps of Engineers showing that their costs increased 276 percent. We have already talked about the Department of Defense at a 132-percent increase. The Department of the Interior, 173 percent, and in the case of the Washington METRO, 122 percent.

Is there any excuse for these tremendous overrun increases?

Mr. SHELEY. I think we have to be a little bit careful and distinguish between cost growth and overruns.

Chairman ROTH. Yes, I agree with that.

Mr. SHELEY. A lot of the increase that is reflected here is inflationary. That is something that is not controllable by the project manager——

Chairman ROTH. Take the Appalachian Regional Commission, 1,000 percent.

Mr. SHELEY. Certainly not all of that, Mr. Chairman. Usually in the defense programs it is about 30 percent of the cost increase, somewhere in that general range.

Chairman ROTH. Aren't they suppose to include a calculation for inflation in their estimates?

Mr. CHELEY. They are, sir. Historically, they have used what I would say very low rates. We have done some studies of this over the years and when you look at our year projection inflation rates and when that year actually comes around, there is absolutely no semblance of the actual inflation incurred as to what is included in that estimate some 4 or 5 years previous.

Chairman ROTH. In your report you say that for a variety of reasons, many agencies were unable to provide all the data requested. The major reason cited by the agency for not being able to provide what we requested was that the data was not readily available.

Are there internal management controls established within these various agencies?

Mr. SHELEY. They have some degree of information on it, Mr. Chairman, but I don't believe in the case of the reply that they are keeping it up. That is why they just said we don't have that information available. They make the initial estimate, get the project funded and they forget it.

Chairman ROTH. In other words, costs have not been a matter of particular importance?

Mr. SHELEY. As long as they are able to continue the project within the funds available.

Chairman ROTH. As long as Congress continues to supply additional funds, they haven't really worried about the costs. I think that is one of the reasons we see this type of problem.

The Secretary of Defense currently decides which programs are reported to Congress on the SAR. Do you believe that this discretion conforms to the law or do you think it is a violation of the intent of the law? For example, is the MX covered by the SAR, do you know?

Mr. SHELEY. No, sir, it is not, unless it just recently went on. The intent of a recommendation that we made was that a DOD program in advanced development be included in the SAR where it ultimately is going to meet the test of SAR reporting. The Congress should be brought into it earlier so you are aware of those major programs in advance development and what the price tag might be.

Chairman ROTH. How many major systems are covered by SAR?

Mr. SHELEY. I think there are 43 now at the present.

Chairman ROTH. How many would you estimate there are——

Mr. SHELEY. Additional?

Chairman ROTH. Additional.

Mr. SHELEY. Probably 8 to 10.

Chairman ROTH. So you say at least 10 more ought to be covered.

Senator COHEN. Mr. Chairman, if I could just ask you a question, not only is the MX covered by the SAR but as I understand it, the B–1 has just been listed in the March 1982 report, is that right?

Mr. SHELEY. I think that's correct, sir.

Senator COHEN. It was not listed last year. So here we have two major systems, one of which is not even listed and the other, which only came out a month ago, is a $25 to $30 billion program.

Mr. SHELEY. In current year dollars.

Senator COHEN. In current year dollars.

Chairman ROTH. Is the Department of Defense supplying what information you need in the case of the B–1?

Mr. SHELEY. No, sir.

Chairman ROTH. Would you review exactly what has transpired?

Mr. SHELEY. Early in March, we made a formal demand for access to the independent cost estimate and the CAIG estimate. That was denied. We are still pursuing the matter. We hope to resolve it in the next several days.

Chairman ROTH. You think you will secure the information?

Mr. SHELEY. It can go either way, I think, at this time.

Chairman ROTH. What are the grounds for the refusal to supply this information to the General Accounting Office, which, after all, is the watchdog for Congress?

Mr. SHELEY. Principally on the basis that they represent internal working documents. But I would prefer to give you for the record the

precise reasons that they set forth in the two letters,[1] one from the Air Force and one from the ——

Chairman ROTH. Do you have them here now?

Mr. SHELEY. I do not have them with me but I can furnish them.

Chairman ROTH. But the thrust of it is that they are internal documents?

Mr. SHELEY. Yes.

Chairman ROTH. I don't really understand. How can that be a matter of no concern to the Congress? After all, its taxpayers' dollars we are talking about, why shouldn't we be concerned?

Mr. SHELEY. I have some concern about that position also.

Chairman ROTH. Couldn't they almost reject any request on that ground?

Mr. SHELEY. Stretched to its ultimate definition, I think they could.

Chairman ROTH. Just looking at the copy of a letter from the Secretary:

> Carefully reviewing the request, I have determined that to release the requested report to you would seriously interfere with the decisionmaking process regarding this program. The requested report contains frank advice, opinions and recommendations from my staff to be used in making budget program formulation deicsions for fiscal year 1984. While I recognize GAO is conducting an ongoing review of the B–1 program we have attempted to the maximum extent possible to provide you with access to information which would be useful. The report in question, however, is an internal executive document fundamental to the deliberative process which I believe is outside the scope of GAO's right of access.

I will ask you this question, basically what you are requesting is the basic financial information, is that correct?

Mr. SHELEY. That is correct, sir. The Air Force cost assessment and the CAIG estimate.

Chairman ROTH. Are you asking for the frank advice and opinions, is that part of your request, or just the financial information?

Mr. SHELEY. Primarily the financial information, but there would be some advice probably in the package. We, at one time, last fall, did review the independent cost assessment and I do not recall the extent of, let's say, frank information that was included in that, but it has been 7 or 8 months ago.

Chairman ROTH. I would request that you keep the Chairman advised of the developments in this area.

Mr. SHELEY. We will be pleased to do so, sir.

Chairman ROTH. Are the cost overruns and schedule slippage revealed in your report accurate or are they underestimated?

In other words, is the report worse than you state?

Mr. SHELEY. You have to keep in mind, we did not audit this data. This data was solicited by us to be compiled into this report. The large volume of it and the time available to put the report together——

Chairman ROTH. So you accepted their figures?

Mr. SHELEY. We accepted their figures.

I would, based on past experience, anticipate there is a certain degree of optimism in some of the estimates we received.

Chairman ROTH. One final question, and then I will turn it over to Senator Cohen.

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[1] See pp.. 25 and 26.

When the various agencies submit their figures, for example, in the cast of the Department of Defense, I understand they have a number of estimates made by different internal groups, it appears sometimes that the practice is to give Congress the estimate that will enable the Pentagon to buy in. Would it make any sense to require that they give the range, of estimates to Congress so that Congress in deciding whether or not to support a project, would have available all estimates from the lowest to the highest.

Mr. SHELEY. It certainly would make sense, and we have, in fact, made a recommendation to that extent several years ago that included in the SAR's, in particular, that a range of estimates be included, particularly as it regards inflation assumptions.

I think it makes eminent good sense to have a range of estimates. You are correct, there are several estimates prepared. There is usually one prepared in the program office, project office, one at the service level, and one by the CAIG. And these estimates, I think, are used in the decisionmaking process.

I would not anticipate any one of them being necessarily the key one, but I think they all should be considered in arriving at the decision as to whether or not to go forward with the program.

Chairman ROTH. Going back to the civilian agencies, it seems that the thrust of your report is that the top management in these agencies are unaware of the cost of their programs, and that they do not have the information immediately available to give to you.

Mr. SHELEY. If, in fact, they do not have it, as they reported to us, then I would say your assumption is correct, that top management is not aware, does not have visibility over the anticipated costs.

Chairman ROTH. Couldn't that be a principal reason for costs going out of sight?

Mr. SHELEY. It could be a very significant and contributing factor in creeping costs.

Chairman ROTH. Would it help to require the project managers to be identified in each of these projects so that each would be held accountable?

Mr. SHELEY. Well, it certainly wouldn't hurt. We have felt over the years that one of the problems, at least, within DOD, is the lack of continuity in the project manager area. In DOD, most projects are typically managed by a military officer and they rotate on a periodic basis.

Chairman ROTH. I believe you testified to that effect recently before this committee.

Mr. SHELEY. Yes.

Chairman ROTH. I recall that.

Mr. SHELEY. We have recommended that conceivably maybe a civilian might be a better one to have. It would give you continuity.

Chairman ROTH. One of the things that particularly bothers me is the civilian agencies cost overruns. At least, you can rationalize in NASA or in the Pentagon that many programs involve pushing the frontiers of science and it can be extremely difficult to estimate those kinds of costs.

In many of NASA's and DOD's projects, and certainly the majority of the civilian agency projects, you are building dams or you are building buildings, you are not pushing scientific frontiers. We have

been building public buildings ever since we have been in this country. What has happened to the Hart Building? How much did the cost go up on that? Certainly the record of construction in the city of Washington is unbelievable.

I understand that the Hart Building cost went up 61 percent.

Mr. SHELEY. That is correct.

Chairman ROTH. The original estimate was $47.9 million and the current one is $137.7 million. My understanding is, if anything, we have downgraded the building. What possible explanation can there be of these increases?

Mr. SHELEY. Again, I think inflation is part of it. But there are design changes that take place during the construction process, unknowns in the foundations, foundation conditions, there are many reasons. I agree with you, I think this is far out of line. I don't think the commercial sector could tolerate those kinds of cost increases.

Chairman ROTH. How many businesses really could continue to perform and to be profitable if they had these kinds of estimates?

Mr. SHELEY. I think a lot of businesses would be in trouble.

Chairman ROTH. I frankly think the inaccuracy of these estimates is outrageous. All you can conclude from it is that it is done deliberately as a means of getting these projects, whether civilian or defense, into the hopper and once they get the nose of the camel under the tent, it is full speed ahead and the cost be damned.

Mr. SHELEY. I think you and I have discussed this on past occasions, too. Once a project gets underway it takes on a life all of its own and develops its own constituency and they are difficult to terminate. They rise from the ashes like a phoenix and programs we have seen canceled at one time they somehow resurfaced as a new program, maybe with a different name, but they are very difficult to terminate once started.

Chairman ROTH. I would like to call on my colleague, Bill Cohen, who has been such a strong leader in this whole area of cost control.

Senator COHEN. Mr. Sheley, you indicated the Department of Defense has accepted some of your recommendations but has rejected five major ones to date; is that right?

Mr. SHELEY. Not necessarily major ones. They have accepted a large number of major recommendations. These are what we consider open agenda items that still have high utility.

Senator COHEN. In spite of the changes that have been made, apparently, the quarterly selected requisition report is still not comprehensible, is that right?

Mr. SHELEY. Well, I think we can understand it to some degree, but we work with them quite a bit.

Senator COHEN. You might, but they are supposed to be for our benefit.

Mr. SHELEY. Correct, and I think it is very difficult for you to understand.

Senator COHEN. I cannot call you up here every time I want to look at a weapon system and say, "Give us a report." General Kelly is quoted as saying he doesn't understand it, and doesn't know anybody who does. Then he added, "I don't think one could have made them so confusing on purpose."

Do you agree with that?

Mr. SHELEY. That is a tough question. I don't know why General Kelly would say that.

Senator COHEN. He was asked the question, "Do you think it was by design or accident?" He said, "I don't think anybody could have done it on purpose."

Mr. SHELEY. It is possible.

Senator COHEN. Let's take the converse. Is there a way to make it more comprehensible and simpler? Your statements say you want to have more honesty up front. How do you get more honesty up front?

Mr. SHELEY. In realistic estimates of the cost of a program, to begin with.

Senator COHEN. How do we get that?

Mr. SHELEY. We have means to do that.

Senator COHEN. What means do we have?

Mr. SHELEY. We have the capability, and I think the chairman was referring to this, we have been building buildings for a long time, why can't we come up with a good estimate?

Senator COHEN. I asked you a question, what do we have in place now, and the answer is you have a $137 million building over there.

Mr. SHELEY. The problem with the SAR's is they are perpetuating some estimates that were made many years ago and even on some of the newer programs we raise questions as to how valid that estimate is.

Historically, when an estimate is prepared, people preparing that estimate do not consider the fact that funding may not be in place at the time they need it, they do not consider the fact that all these technological developments they are going to make are not going to fall into place just as they expect them to, they do not anticipate all the people——

Senator COHEN. Stop there. How are you going to legislate against that?

What changes are you going to make to say Congress is going to appropriate that money on a regular basis and you can expect all these bricks to fall in place when we build that building? You can't.

Mr. SHELEY. I don't think you can legislate morality. You cannot legislate it, I don't believe. It has to be a partnership effort and a sincere effort on the part of the agencies to do a better job in informing the Congress.

Senator COHEN. Is there, I take it, an insincere attitude on the part of the agencies today?

Mr. SHELEY. I would say there is less than a fully sincere effort. I hate to describe motives, but I think over the years we have seen that the estimates are just typically overly optimistic. There has to be a reason for it and the reason is if you come in with maybe a realistic estimate, you are not going to get your program to fly.

Senator COHEN. What sort of mechanism can we put into effect, since we can't legislate morality, to insist that we get only the most honest and candid cost estimates?

Mr. SHELEY. At the time you are considering authorization of a new project, you are just going to have to really drag it out with the proposer of that project and make sure all of the what-ifs have been taken into consideration.

Senator COHEN. Against what? What do we measure it against?

Mr. SHELEY. I think you can measure it against past projects.

Senator COHEN. Are we going to measure it against the Hart Building? How do we measure it? We are going to get the Defense Department coming in and saying, "We believe this is what the reasonable

cost is." You have some agency coming in and saying we think the Hart Building can be built for this. What do we measure this against? In the Defense Department we already have the CAIG, the Cost Analysis Improvement Group. I am told CAIG estimates are far more accurate than the DOD program manager's estimates. In spite of the existence of CAIG available to DOD, in spite of that independent analysis and evaluation, the fact of the matter is that DOD comes in by 132 percent under estimate. That is, a 132 percent cost growth in spite of having this independent evaluator. What do we do? Do we take the CAIG estimates and make them public when you submit the DOD requests? Is that the kind of yardstick we should use?

Mr. SHELEY. Or something comparable to it, whether it be the CAIG or some other independent estimate, but I think one thing—let's make sure when we talk about this 132-percent increase, we know what we are talking about.

Senator COHEN. Let's say part of it is inflation. So we have got to change that. We have got to get a more accurate inflationary projection, whether it is CBO's or OMB's figures. The second thing we have to do is deal with program growth that we authorize, isn't that right?

Mr. SHELEY. That is correct, changes in the number of units.

Senator COHEN. That is one exception I might make or offer to make in terms of the chairman's proposal. Every time you have a 25-percent increase that automatically terminates the funding of that proposal, well, perhaps you ought to exempt when we or the Department increases the number of units provided, for example, ordering 1,300 F–16's as opposed to 300. Obviously we can't criticize that program on cost growth if, in fact, we are building more aircraft.

Mr. SHELEY. That is correct.

Senator COHEN. But what do we do aside from that? The problem I have with your analysis and with the chairman's bill is that all programs which have a cost growth of 25 percent or more are terminated. Well, as I understand it, every single program we have got that you looked at had a cost growth of over 25 percent. That means all the programs would be terminated under this legislation, would it not?

Mr. SHELEY. It would, but keep in mind that is not just a one-shot period of time increase. That is an increase over a considerable period of time and the trigger mechanism this bill would provide would give you an opportunity before it got to $553 billion, if you wanted to exercise the right of Congress to terminate a particular program when it went up the first 25 percent, you would have the opportunity to take another look at it and say, do we really need this, can we really afford it? So what we are talking about is something similar to what we have been contemplating before. That is, we have, for example, a 10-year life span of any particular Federal program and that it automatically terminates at the end of that 10 years, until such time it is revived or given new life by Congress.

Senator COHEN. You are suggesting the same sort of approach here, basically, that anytime a program's cost growth is exceeded by 25 percent, it automatically terminates until such time that Congress breathes life back into it, taking into account whether it is due to inflation, program growth authorized by Congress, or some other factor.

In your judgment, would that produce the kind of discipline that we need in our Federal programs?

Mr. SHELEY. I think it would give you a considerably better control over the cost growth than you have at the present time and to the extent that you would have early awareness, you would not get a report from GAO that says in 5 years, since 1976, projects have increased, the amount of average increase is double. You would have a chance to look at these as they occur and then make an informed decision as to whether or not you really want to continue with that project.

Senator COHEN. So we have to have a two-pronged approach:

No. 1, get more honesty and candor up front, and No. 2, get a second opinion on the cost estimate, at least, maybe a third and fourth.

Where are we going to get those?

Mr. SHELEY. We have provided this information in some cases. Last fall with regard specifically to the B–1——

Senator COHEN. But are you prepared to do it on each program, with each system coming up to the Hill?

Mr. SHELEY. I think we could in terms of new starts. I don't think we could go back and take all these programs.

Senator COHEN. Let's start from scratch right now—no more new programs unless we do it on this basis.

Is GAO going to be in a position to give us realistic cost analyses on each new program, each new system coming up for authorization under our half-a-trillion dollar budget each year?

Mr. SHELEY. What we could do is tell you whether or not those estimates that you are getting are reasonable in terms of the underlying assumptions and the mechanism used to project the cost into the future.

It would not be an independent, let's say, cost estimate. We are not in that business, but we can take a look at estimates that have been made and we can make an evaluation as to how realistic it is.

Senator COHEN. Do you have the authority to do it now?

Mr. SHELEY. Yes, sir, and that is part of the problem we have run into with the B–1 program today.

Senator COHEN. Why do you say that?

Mr. SHELEY. We have been denied access to the basic documents we need to carry out such an assessment and we are trying to resolve the matter currently.

Senator COHEN. Does that have to do with the CAIG estimates?

Mr. SHELEY. Yes, sir.

Senator COHEN. They will not give you the CAIG estimates?

Mr. SHELEY. They have refused to give us the CAIG estimates.

Senator COHEN. Is it your opinion GAO has the legal authority to get those?

Mr. SHELEY. Yes, sir. it is. We would not have made the demand, formal demand, if we felt we did not have the authority.

Senator COHEN. How long a timeframe do you think is necessary for you to resolve that issue?

Mr. SHELEY. We expect to resolve it in the next several days, one way or the other. You are aware DOD does have the right to certify against the releasing of that information. We don't know which way it is going to go at this point in time but we are actively pursuing it.

Senator COHEN. Just a couple more questions, Mr. Chairman.

Let me ask you whether you feel that the CAIG estimates are being given sufficient weight by the Department of Defense.

Mr. SHELEY. I cannot really answer that question because that is a subjective question and varies case by case. I don't know how it was used by the Secretary of Defense in regard to the B–1 program, for example.

Senator COHEN. The information that I have is DOD cost estimates at the planning stage and in the development stage is subject to this independent evaluation, and yet on an average they are still underestimated by 100 percent at the planning stage, and by 50 percent at the development stage.

So what is going on?

Mr. SHELEY. Again, I think it is that overoptimism I referred to earlier.

Senator COHEN. How do you think the CAIG can be more effectively utilized?

Mr. SHELEY. I think the Secretary of Defense, if he believes in the integrity of that group, is going to have to give an awful lot of weight as to what their evaluation is. And I don't know whether he is or isn't doing that at this point.

Senator COHEN. Mr. Chairman, let me suggest I intend to allow the GAO to pursue its remedies in seeking that information, but if that information is not forthcoming to GAO, I would certainly consider joining in the effort to secure it by congressional means if necessary.

I don't see any other way in which we are going to finally get a grip on what is going on. I am not singling out the Defense Department. They, at least, have the SAR. It is not working as effectively as it might, but it is at least something we have that no other agency in the civilian sector has to comply with.

It seems to me if we are going to be asked to continue to fund major programs, then we ought to know what the facts are. There should be absolutely no reason, other than possibly national security reasons, why independent estimates should not be made available to either GAO or to the Congress on this system or all future systems. I intend to support legislation in the future that will give us an opportunity, whether it is the Defense Department or in the civilian sector, to evaluate competing analyses of weapons systems or any other program in the system.

Chairman ROTH. I would just underscore what you are saying, Senator Cohen.

No. 1, I would point out to the Pentagon and others that we are all part of the same Government and that if Congress is going to discharge its oversight, and we do depend very strongly on General Accounting being our watchdog, that there has to be a full and complete disclosure. So I share your concern and unhappiness.

I would make one comment, not with respect to what you were just discussing, Senator Cohen, but I think respect to the underestimates, that Congress is not entirely innocent. That there has been, shall we say, a conspiracy in many cases whereby the interested Members of Congress work with the agencies and the other groups in helping to get these programs—these projects underway recognizing what was said earlier that once they get them started they have a life of their own.

I think one of the major changes since the first time since I have been in Congress, that there is real concern in the Congress as well as

in the administration about costs and I think, hopefully, that in itself should have a beneficial impact.

Senator COHEN. Let me elaborate on one point that is a particular beef of mine and that is how we pay for water projects in this country.

You tell me where you are going to borrow money at 3⅞-percent interest and yet many of the water projects not yet built are still funded at a 3⅞-interest rate.

That is, in my judgment, one of the biggest ripoffs going on in this country today. If we are going to have a project, we ought to have a realistic cost-benefit ratio, not something that shows benefits of $2 for every $1 invested when, in fact, we are subsidizing the interest rate 10 or 12 or 15 percent.

So there is a lot more honesty we can insist upon in our Federal funding of programs, not only defense systems but public sector systems as well.

Chairman ROTH. This committee as the principal oversight committee, should make it a primary task in development of solid cost information beginning with the initial estimate right down through the project.

Senator Levin?

Senator LEVIN. Thank you. Mr. Chairman.

Mr. Chairman, on March 8, the Comptroller General asked the Secretary of Defense for the CAIG estimate on the B–1 bomber program and any supporting documents. On the same day, the Comptroller General asked the Secretary of the Air Force for the independent cost assessment and any supporting documents. My understanding is that those requests were denied, is that correct?

Mr. SHELEY. That is correct, sir.

Senator LEVIN. The next step in this process, as I understand it, is for the GAO to report to the President the denial of that access, is that true?

Mr. SHELEY. Among other people, that is correct.

Senator LEVIN. And then it would be up to the President to determine whether or not to allow access to those documents?

Mr. SHELEY. That is correct.

Senator LEVIN. Has the GAO decided whether to report the denial of the DOD and the Air Force to the President?

Mr. SHELEY. We still have the matter actively under consideration and we expect to resolve that specific question in the next several days.

Senator LEVIN. Would these documents be valuable to the GAO?

Mr. SHELEY. In the case of assessing the validity of the B–1 program cost estimates, you couldn't do it without them.

Senator LEVIN. Both these documents, both CAIG and the ICA?

Mr. SHELEY. Yes, I think both would be necessary to get a comprehensive picture of the adequacy of that estimate.

Senator LEVIN. Would that include, and this is very important, the supporting documents, as well as the estimates?

Mr. SHELEY. It would vary, Senator, as to what those supporting documents are. I don't know, we haven't had access to the reports so I do not know to what extent supporting documents even exist at this point. It would depend on what is there and how significant and cogent it is to the basic estimate itself.

Senator LEVIN. Who should decide whether the supporting documents are relevant to your inquiry—and our inquiry—because you are an arm of Congress? Should you decide it or the DOD and Air Force decido it?

Mr. SHELEY. We take the position we should.

Senator LEVIN. Are you going to stick to that position?

Mr. SHELEY. Yes.

Senator LEVIN. If these documents are essential to your estimates of the B–1B costs, and I couldn't agree with you more, and therefore, essential to our estimates of whether we should proceed to build the B–1B, what is the reason for the hesitancy on asking the President for these documents? Why haven't you notified the President?

Mr. SHELEY. We have been trying to resolve the matter. Short of doing that, if we are not able to, then we will report it.

Senator LEVIN. So we have your commitment that if this is not satisfactorily resolved, then you will notify the President of the denial?

Mr. SHELEY. I will make every effort to secure the signature of the Comptroller on such a letter. Keep in mind, he makes the final decision in that matter.

Senator LEVIN. As far as you know, if this is not adequately resolved and you do not get the documents you believe you are entitled to, both CAIG and ICAA, then as far as you know, the Comptroller General is ready to so notify the President?

Mr. SHELEY. I believe he is.

Senator LEVIN. Mr. Chairman, this Congress needs all available information before it can decide whether to proceed on major projects where there are cost overrun problems. You draft bill, the Nunn amendment of last year, and a number of other efforts are aimed at improving our information on costs. The questions Senator Cohen has asked are in the same direction—how do we monitor, how do we measure, what is our base line data, how can we track these systems, and how we can know more at the beginning so we can make better decisions at the beginning?

I think that is really critical. It is critical that we have available to us the data that is already in existence. And here we have got the Department of Defense and the Air Force stonewalling a request from the GAO. By the way, I have made the same request as an individual Senator and I have been refused the CAIG and ICA estimates.. I don't know why they are covering up, and I can conclude nothing else but that they are covering up the cost estimates and the supporting data of the B–1B bomber because those estimates are higher than the official estimate of the DOD. Now, Mr. Sheley, do you have reason to believe that those estimates are higher than the official cost estimate of the DOD?

Mr. SHELEY. I have no reason to believe they are, or are not at this point in time. I have yet to see.

Senator LEVIN. So you just don't have any information as to whether or not those estimates are higher?

Mr. SHELEY. No.

Senator LEVIN. Are you familiar with testimony before the Armed Services Committee, and I believe this committee, that those estimates are higher?

Mr. SHELEY. By whom, sir?

Senator LEVIN. Pardon.

Mr. SHELEY. Testimony by whom?

Senator LEVIN. For instance, are you familiar with Lieutenant General Kelly Burke's testimony before the Armed Services Committee of October 29 last year that the ICA estimate was higher than the $20.5 billion?

Mr. SHELEY. I have some recollection of that, sir.

Senator LEVIN. And do you have recollection of witnesses Margolis and DeLauer saying the estimates were larger than the DOD estimates?

Mr. SHELEY. I don't recall that particular testimony.

Senator LEVIN. We should make that available to you.

Mr. SHELEY. I am sure we have that.

Senator LEVIN. Mr. Chairman, I think that this is a critical matter and involves a program right in front of us. We are no longer talking about programs in general, as important as that is. We are talking about a specific program that we are going to be acting on soon and that is the B–1B program.

We acted on it last year and there is going to be another proposal to strike that program this year.

We need the cost estimate information for the same reasons you need the information. I presume it is relevant, at least I hope it is, whether that bomber is going to cost $20.5 billion, $25 billion, or $30 billion. I hope that is relevant to our consideration.

Mr. SHELEY. It should be and you have to make those judgments and determination as the Congress as a whole.

Senator LEVIN. Has it been your experience in the past that both the CAIG and the ICA estimates have been made available to the GAO?

Mr. SHELEY. In the past, for the CAIG, we have very seldom made normal requests; we have taken looks at it in the past but as far as I can recall in recent years, we have had no particular problem with obtaining access to the basic service level——

Senator LEVIN. There are precedents for turning over both ICA and CAIG reports.

Mr. SHELEY. Not necessarily turning over the CAIG, but we have taken a look at the underlying assumptions used by the CAIG.

Senator LEVIN. When you say "taken a look," does that mean the documentation has been turned over to you?

Mr. SHELEY. Well, we looked at it—we have to be careful in determining and defining the word "access."

My lawyers tell me it means just that; it does not necessarily mean hard copy.

Senator LEVIN. I see. In other words, you have had access.

Mr. SHELEY. We have had access.

Senator LEVIN. As far as you know, does the B–1B matter involve any foreign intelligence or counterintelligence activities or law enforcement activities?

Mr. SHELEY. I know of none at this point.

Senator LEVIN. That would be a reason for not allowing you access?

Mr. SHELEY. Yes.

Senator LEVIN. And as far as you know, is there any reason why your access could reasonably be expected to substantially impair the operations of the Federal Government?

Mr. SHELEY. I would like to see a reason given for it.

Senator LEVIN. Has any been given to you?

Mr. SHELEY. No.

Senator LEVIN. Has any been given to you in the denial?

Mr. SHELEY. No; it was raised by the Air Force in their letter of denial that it would cause a problem, but no specific reasons were given.

Senator LEVIN. None were given you orally?

Mr. SHELEY. No.

Senator LEVIN. I will be forwarding to the GAO, Mr. Chairman, the amendment which I intend to offer, which will give the Congress, through its Armed Services Committees, the right to stop a program if the cost overrun becomes known to us through the quarterly reports. I think it is important to not only have the information, but to be able to act promptly and not wait for the next budget cycle. I am not going to ask GAO for their comment today, because they have not had sufficient time to look at it, but I will be asking GAO to give review on such an amendment.

As far as today's hearing is concerned, I would, at this time, Senator Roth, because of the denial of the reports to our arm, the GAO, and to one member of the committee, myself, because of the obvious relevance of the estimates, the CAIG and the ICA estimates and supporting documents, to a critical issue before us, and that is the B–1 bomber decision, I would ask you, Mr. Chairman, if necessary, if this matter is not satisfactorily resolved in the next few days, to issue a subpena to the Secretary of Defense to disclose to the committee the CAIG report and the Air Force report on the B–1B aircraft program cost estimates and any documents accompanying, attached to, or prepared in conjunction with the report. Again, that would apply both to the ICA and the CAIG reports. I would hope this is satisfactorily resolved in the next few days, but I would like my request for this to be held pending in the event the GAO reports to us that the matter is not satisfactorily resolved.

Senator COHEN. Mr. Chairman, could I pose a couple of questions?

Chairman ROTH. Sure.

Senator COHEN. Mr. Sheley, Senator Levin asked you a question about national security issues involved. I was going to ask you whether or not there is any validity in some of the reports contained in the Washington Post several weeks ago about a member of the Soviet Embassy proceeding to the GAO with a number of requests that haven't been numbered yet.

There may be some apprehension on the part of DOD as to what information remains secure at GAO and I wouldn't want to dismiss that.

Is it possible the CAIG or any of the other studies that have been done would contain information concerning improvements or technological changes that have been made to the B–1 that would make these independent estimates sensitive?

Mr. SHELEY. It is conceivable, Senator. As I answered Senator Levin, I am not aware at this point in time of issues such as that.

Senator COHEN. That would be the only hesitation I have in terms of what information is actually turned over. If it is a question of just the cost analysis itself, I think Senator Levin is clearly correct on that. If it involves issues about what changes have, in fact, been made since the design of the B–1 as opposed to B–1B or changes since the B–1B to utilize new technologies, that is another matter and that may be a negotiable point. But if that is not an issue, I think you ought to at least lend some support to Senator Levin's suggestion if GAO is not able to get access to that information.

Senator LEVIN. Mr. Chairman, may I follow that up with one question?

Chairman ROTH. Yes.

Senator LEVIN. I do agree with Senator Cohen's point. In their denial of access to you, did they tell you that access would in any way jeopardize national security?

Mr. SHELEY. I don't recall that being in the Secretary of Defense's letter with regard to the CAIG, but there is some wording along that line inthe Air Force letter with regard to the ICA.

I would have to look at those. You probably have copies of them, I believe.

Senator LEVIN. We have the Air Force letter in front of us, and I don't see any reference to it but nevertheless we will ask that the letter be made a part of the file and it will speak for itself.

Thank you, Mr. Chairman.

[Letters from the Air Force and the Secretary of Defense follow:]

DEPARTMENT OF THE AIR FORCE,
OFFICE OF THE SECRETARY,
Washington, D.C., March 26, 1982.

HON. CHARLES A. BOWSHER,
Comptroller General of the United States,
Washington, D.C.

DEAR MR. BOWSHER: This is in response to your letter of March 8, 1982 requesting access to the Air Force's Independent Cost Assessment (ICA) estimate of B–1B program costs and related documents. The Air Force has already released its officially approved "Long Range Combat Aircraft (LRCA) Independent Cost Analysis, September 1981" plus the back-up briefing charts and supporting documentation related to this document. The documents we have denied consist of (1) briefing charts prepared at various stages of the ICA review process which did not become part of the approved ICA, (2) the Air Force Cost Analysis Improvement Group report, October 26, 1981, and (3) minutes of the meetings of various groups that reviewed the ICA.

I have carefully considered your request and have determined that the national interest will best be served by not releasing the documents previously denied. and I believe the Air Force has cooperated with your staff and provided access I am aware that the GAO has been conducting a review of the B–1B program, and I believe the Air Force has cooperated with your staff and provided access to relevant documents to the maximum extent possible. The internal Air Force documents in question, however, contain advice, opinions, evaluations, and recommendations from subordinates to their superiors. It is my considered judgment that release of such documents would in the future inhibit the candor and objectivity that are essential in the deliberative process. Because release of these documents would substantially impair the Air Force decisionmaking process, I must deny access to them.

Sincerely,

E. C. ALDRIDGE, JR.,
Acting Secretary of the Air Force.

THE SECRETARY OF DEFENSE,
Washington, D.C., March 22, 1982.

HON. CHARLES A. BOWSHER,
Comptroller General of the United States,
Washington, D.C.

DEAR MR. BOWSHER: This is in response to your letter of March 8, 1982 requesting access to the Secretary of Defense's Cost Analysis Improvement Group (CAIG) report on its review of the Air Force B-1B aircraft program cost estimates and any documents accompanying, attached to, or prepared in conjunction with the report.

After carefully reviewing your request, I have determined that to release the requested report to you would seriously interfere with the decision-making process regarding this program. The requested report contains frank advice, opinions and recommendations from my staff which will be used to make budget and program fromulation decisions for fiscal year 1984. While I recognize GAO is conducting an ongoing review of the B-1B program, we have attempted, to the maximum extent possible, to provide you with access to information which would be useful. The report in question is, however, an internal executive document fundamental to the deliberative process which I believe is outside the scope of GAO's right of access.

Sincerely,

CASPAR WEINBERGER.

Chairman ROTH. In answer to the request from Senator Levin, Senator Cohen notes the point as well, I cannot stress too strongly the importance of the Pentagon being up front in providing the figures that are necessary to evaluate the effectiveness and efficiency of the procurement of B-1's or other weapons and equipment.

So, certainly, I support your efforts to secure this in every lawful manner and will write the Secretary of Defense in the hopes that this can be resolved quickly.

We will hold in reserve and see what happens, and what transpires from your own efforts. I think it best that we proceed according to the procedures that have been set in law.

I would like to underscore that there are several considerations in this kind of matter. One is the importance of Congress and the congressional watchdog, GAO, getting needed information.

The second is a question of security, I think the point Senator Cohen made is one that we must be conscious of, to protect any information or data from being released to those who are not entitled to it.

A third factor is that we are not asking, or at least I am not asking, for opinions or recommendations. There has to be a free flow of discussion within the Pentagon just as there is in our senatorial offices, so we don't want to infringe upon that freedom of discussion.

I have to confess having said all that, Senator Levin, that I don't see any of these, at least at this stage, being involved. I do want to make sure that as this committee moves ahead that we act responsibly and in such a way that we are really dealing with the overall problem.

I am concerned about the B-1. That is really only one example of a problem that we are facing both in the Defense Department and the civilian agencies.

What I am very concerned and very outraged about is that I don't think there are any effective controls in Government today. I think a large part of that blame lies with the Congress, but it also lies with the lack of internal controls.

I want to thank you, Mr. Sheley, and the other gentlemen for being here. This is something we will be continuing to review and work

on through legislation and oversight and I look forward to working with you.

Mr. SHELEY. We appreciate your support in the matter of the B–1B and we will, of course, advise you as soon as we have a resolution.

Chairman ROTH. Thank you, gentlemen.

At this time, it is my pleasure to call forward Dr. Alice Rivlin, who needs no introduction. Because we seem to be proceeding more slowly than I anticipated, Dr. Rivlin, I would suggest, if you can, to summarize your statement so that we can begin questions quickly.

If you do want to read it, that is all right.

TESTIMONY OF ALICE M. RIVLIN, DIRECTOR, CONGRESSIONAL BUDGET OFFICE, ACCOMPANIED BY BOB HALE, ASSISTANT DIRECTOR FOR NATIONAL SECURITY, AND ED SWOBODA, DIRECTOR, DEFENSE COSTING UNIT

Ms. RIVLIN. I will be happy to skip parts of it and read parts of it, Mr. Chairman.

Before I do that, let me introduce my two associates.

On my right, Bob Hale, who is our Assistant Director for National Security, and on my left, Ed Swoboda, who runs our Defense Costing Unit.

It is a pleasure to be back before this committee as we resume discussions about the very important subject of controlling cost growth.

This has a long history which I won't go through, although I think the message is that progress has been made in improving procedures and in improving reporting, but we have a long way to go.

Our most comprehensive and consistent data on costs are contained in the selected acquisition report, or the SAR. The SAR is a quarterly status report to the Congress on major defense acquisition programs. It represents each system program manager's best estimate of key performance, schedule, and cost goals.

It compares these estimates with baseline parameters established at the time the programs were approved for full scale development and it explains the variances from these baselines. It reports on the progress and the problems in meeting designated performance, schedule, and targets of the programs. Cost and schedule data for each of the 45 to 55 weapon systems included in the SAR cover the full periods from the decision to proceed with full-scale development until the completion of the planned program. For fiscal year 1983, the 47 SAR systems account for 48 percent of the administration's overall defense procurement request of $88.7 billion. The SAR's voluminous documentation typically fills 900 pages, and, as Senator Cohen has pointed out, it's a very difficult document to read.

However, we have tried to do so and what I will say is based on our best efforts to review the SAR and point out what it says, also to indicate how it could be improved.

The most recent SAR, that of December 1981, contains the largest quarterly increase in total SAR costs ever reported, $150.1 billion in nominal dollars, or a 50-percent increase over the preceding quarter. The total cost of all SAR programs is sometimes viewed as a measure of DOD's success in controlling cost growth in weapon systems. Thus, the latest increase seems to suggest that weapon system costs are again

accelerating out of control. More detailed analysis, however, shows that much of the reported cost growth stems from factors other than inadequate management.

New programs and additions to planned procurement accounted for 85 percent of the $150 billion total increase in the December SAR, as shown in table 1 of my statement.[1] Two small systems totaling $1.3 billion were dropped from the SAR. And one program was added; namely, the B-1 bomber with a projected acquisition cost of $29.5 billion. The net increase in the SAR total cost from these changes was $28 billion or 19 percent of the overall increase.

Additional planned procurement quantities associated with expansion of defense programs accounted for a further $99 billion or 66 percent of the total increase. Two thirds of this quantity variance reflects the cost of additional tactical aircraft. Large increases are also planned in ship and missile procurement.

The overall result of these program changes—that is, the additional programs and the quantity—was to add $127 billion to the September SAR cost or 85 percent of the total.

After these adjustments for systems and quantity changes, the December SAR still reported an increase of $22.7 billion in the costs of 46 systems at the quantities programed in the September SAR. Moreover, this cost growth is not spread evenly over the SAR weapons systems. In some cases, the cost growth increases reported in the December SAR are far higher than the average. Table 2 shows the percentage increases in unit prices and the effect on total procurement costs for the remaining years of the program for several systems that had no quantity increases in the December SAR.[2]

For these 10 systems, the primary causes of cost growth fall into four categories: unanticipated inflation, schedule changes, estimating changes, and engineering modifications. For three systems, over 50 percent of the cost growth was a result of revised economic indexes. For six systems, estimating and schedule changes together caused most of the unit price increases. For one system, engineering changes accounted for 93 percent of the unit price change.

Focusing solely on 1983, unit cost growth is even higher for selected programs. For the 10 SAR systems shown in table 3, the increases in unit prices between September and December led to an increase of $1.4 billion in the 1983 budget authority.[3] One feature common to all these systems, which contributes greatly to their large percentage increases in unit prices, is that the planned procurement rates were lowered between September and December.

The data in the foregoing tables suggest that there are still areas of substantial cost growth. The administration has taken several steps, however, to control acquisition management within DOD, and some favorable evidence of these efforts is apparent in the December SAR.

In press releases accompanying the President's budget in February, the administration claimed SAR system savings of $4.2 billion from improved acquisition management. Specific initiatives cited included economic production rates, multiple-year procurement, elimination of marginal programs, and selection of lower-cost alternatives. Unfor-

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[1] See p. 39.
[2] See p. 41.
[3] See p. 42.

tunately, as reported in the December SAR, these savings are offset to some extent by schedule delays and program stretchouts which caused a $3.9 billion increase in program costs.

CBO reviewed the four 1981 SAR's to determine whether the savings claimed by the DOD in the press releases appeared in the SAR tabulations. The SAR data revealed savings of $5 billion, or $800 million more than the administration's total.

While these amounts are similar, however, there was substantial overreporting and underreporting for individual systems. The SAR substantiated DOD's claimed savings of $2.3 billion for a group of seven systems. For six other systems, however, DOD claimed 5-year savings of $1.5 billion, but only $300 million could be supported on the basis of the SAR data. And in eight further systems the SAR reported savings of $1.9 billion, but DOD claimed only $400 million.

I go through this arithmetic because basically we are concerned that the SAR, which is supposed to be our best source of information about DOD acquisition programs, does not contain data adequate to enable us to review the administration's claims of management efficiencies. There are simply inconsistencies in the claims and the data.

In addition to the administration's efforts to control acquisition cost growth, DOD itself has taken steps to improve SAR reporting. Several points should be made, however, about the accuracy of the current SAR in assisting the Congress to evaluate weapon system cost growth.

A persistent problem in the SAR is the treatment of unanticipated inflation and its effect on program cost. DOD has improved its inflation accounting in the December SAR by employing disaggregated inflators for different types of systems. By forecasting that the inflators for selected systems will increase at higher rates than the overall GNP deflator, which they are using for everything else, DOD has brought its budget projections closer to what we think will happen.

Our review found, however, that program managers continue to have difficulty in accurately applying the inflation rates prescribed by the Office of Management and Budget and the Office of the Secretary of Defense. For example, four systems have inflation computational errors totaling $4 billion. That is a very large computational error. Many other systems have errors of a lesser order of magnitude.

Chairman ROTH. Was that $4 billion?

Ms. RIVLIN. I said $4 billion, yes. It does seem like a lot.

Chairman ROTH. Fairly substantial, yes.

Ms. RIVLIN. A related problem concerns the level of projected inflation. OMB and OSD projections of inflation have been revised upward since the September SAR bringing them more nearly in line with the CBO inflation rate projections. Nonetheless, application of these new projections still results in underestimation of system costs in comparison with the CBO rates. Use of the CBO inflators would add a total of $15.5 billion to DOD's projections in the December SAR.

Indeed, the extent to which the December SAR understates inflation costs may be greater than $15.5 billion. The CBO review turned up 14 systems whose total estimated program costs were arbitrarily adjusted downward "due to refinement of estimate to offset new economic indices." In essence, this action means that for these 14 systems SAR program cost was further underestimated by $3.4 billion.

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The question is what can we do to improve the SAR. The SAR clearly provides a great deal of useful information about specific systems and the overall management of weapons acquisition. There are, however, a few changes that would greatly enhance the utility of the SAR without imposing additional paperwork requirements.

Let me summarize these very briefly. One might be annual rather than quarterly reporting. Much of the quarterly SAR is simply a repetition of the annual one. It might be better to do it annually and simply provide a quarterly exceptions statement detailing places where there is a significant change in status but not to repeat all of the data.

Another problem is noncomparable base years. The base year for each system is the year in which it is started. It would be much easier to understand the data if there was a common base year.

A third possible change relates to the question of inclusiveness to which you have already alluded. Sometimes programs are apparently arbitrarily excluded. An approach to greater comprehensiveness would be to raise the dollar thresholds for eligibility, index the new thresholds to forestall unintended future inclusions, but eliminate the authority of the Secretary to simply exclude a system.

The SAR apportions cost changes into seven categories: Economic, quantity, schedule, engineering, estimating, support, and other. Although these categories provide a complete accounting of cost changes, they do not always illuminate the reasons for the cost variances. Several additions to the variance report should be considered.

For engineering changes, the SAR should indicate whether engineering changes result from modifications to upgrade system performance or whether the changes are needed to meet performance objectives as set forth in the development estimate. If upgrades are the reason, the SAR should identify the changes in mission requirements that justify the modification. If engineering changes are required merely to meet the developmental estimate objectives, the SAR should discuss the related shortfalls in performance that necessitated the change.

Several studies of real cost growth indicate that a major factor is funding limitations, which lead to stretchouts and inefficient production rates. But another source of schedule slippage may be equally important—development problems that delay the transition to the production phase. At present, the SAR does not distinguish systematically among these or other causes of schedule change, although occasionally there are references to funding cutbacks as causes of schedule variance. As with engineering changes, the schedule-related cost variance should be identified in the SAR as stemming from some underlying cause: funding, developmetnal problems, mission change, or any other.

One aspect of schedule variance is the cost of changing from the economic buy size. The Defense Department has identified economic buy sizes as one of its principal management initiatives. The SAR needs to show the economic buy size for each system and to show the cost of deviating from that procurement rate. Only then will the Congress be able to make well-informed decisions about funding levels for different systems.

Finally there is the question of supporting documentation. Detailed analysis and validation of the SAR currently are precluded by the unavailability of backup data. These data obviously exist, for without

them preparation of the SAR itself would not be possible. The Congress needs to insure its access to backup worksheets, with proper safeguards for proprietary contractor information, in order to permit across-system and over-time analyses of the acquisition of individual systems. The SAR itself should contain enough of this information to permit validation of the calculations leading to the reports on cost variances. This would mitigate against inconsistent procedures and arbitrary assignment of cost increases to variance categories.

In conclusion, Mr. Chairman, I think there has been progress in the SAR as a useful document. Our analysis indicates that it could be greatly improved to make it more useful to the Congress and more helpful in understanding why cost growth occurs and what to do about it.

Chairman ROTH. Thank you, Dr. Rivlin.

Do you think that the concept of SAR is worthwhile extending to the civil agencies?

Ms. RIVLIN. Yes, I do. I think it should be very carefully thought through in terms of not creating unnecessary paperwork, but it would seem to me to be a useful concept. It has a long way to go, even on the military side, but the idea of extending it seems to me to be reasonable.

Chairman ROTH. Has your office made any studies of the increase in costs in civil agencies?

Ms. RIVLIN. No, we haven't. We have looked at the GAO study and we are aware of other studies that show the increase in costs for civil agencies are roughly comparable to those in military agencies, but we have not done independent work on this ourselves.

Chairman ROTH. I must say, I was greatly shocked at the conclusions drawn by the GAO study. It is hard to understand why so many of these civil projects grew by such leaps and bounds. Possibly there is some answer, as you look into the details. But here we are, dealing with projects in many cases that are not new and different. Certainly construction of a building on the Hill, whether it is the Hart Building or in downtown Washington, it is hard to understand these tremendous increases in costs beyond those of the so-called initial estimate.

Do you have any explanation for this?

Ms. RIVLIN. I think it is a combination of factors. My guess is that you will find they are very similar. There is nothing about being military or civilian that makes them different.

Chairman ROTH. I agree.

Ms. RIVLIN. The reasons include being hopeful that costs will be low, a lack of incentives to give realistic cost estimates or, in fact, very often, incentives not to give realistic estimates. Other reasons are inflation and changes in specification.

Chairman ROTH. In fact, the incentives really are to underestimate; are they not?

Ms. RIVLIN. Oh, absolutely.

Chairman ROTH. How do we offset that? One of my concerns is that obviously the Department of Defense is a favorite whipping boy, but Congress, I think, has tended to ignore the other side of the picture, and that is the civilian. How do we offset that?

Ms. RIVLIN. The first thing is to do exactly what you are doing; namely, to make clear to everybody that you care very much about honest estimating and to get as good a prior-cost estimate as you can, possibly resorting to having an agency like GAO do an independent estimate for the Congress.

Chairman ROTH. You may have heard me ask earlier, at least in the case of the Pentagon, that we have a series of what I would call guesstimates as to the cost of new weapons or equipment. Why shouldn't we require each of those estimates, or the range to be supplied to the Congress, particularly in our deciding whether or not to proceed with the project?

Ms. RIVLIN. That is a difficult one.

I think you do want the Department's best estimate about what a system will cost. You will have a lot of confusion if you just get a lot of different numbers. If you ask for a range, I think that the incentive would be to snow you with a lot of different estimates—high and low—so no one can figure out what the system is going to cost.

I think you would want to obtain the best estimate the Department can give you, plus some indication as to where the uncertainties lie and how large they are.

Chairman ROTH. I think that is a very valid point. I agree with you. We do want to know what their best estimate is. On the other hand, there seems to be a fairly broad consensus that the estimate we get is not the best estimate but the one that best fit getting the project under way. I would say that is true on the civilian side as well as the defense side.

Going back to your figure of $4 billion, in effect aren't you saying that they deliberately didn't tell us the truth on this?

Ms. RIVLIN. No, what we are really saying is that the document is not as carefully prepared as one would like to see. There were errors in both directions. The examination of the document indicates that it is probably prepared by a lot of different people and is not very carefully checked for consistency.

Chairman ROTH. I guess I am really making reference to a different part of your statement.

In your prepared statement, you said, "In our review we found 11 systems which total estimated program costs were arbitrarily adjusted downward due to"——

Ms. RIVLIN. Yes.

Chairman ROTH. Is that the reference you are making?

Ms. RIVLIN. That is a different point, actually. I thought you were talking about the computational error. In that case, actually what we are seeing is remarkable honesty. I think what happened was that new and higher inflation estimates came from the Office of the Secretary of Defense at about the time the SAR was being put together. When those were run through, they resulted in higher estimates than some control totals for those systems. And they simply stated that; they said, "We arbitrarily reduced those." Nobody fudged the numbers. They were quite up front about what they were doing, but it does seem to be an underestimate.

Chairman ROTH. Have you had an opportunity to review the proposed legislation that we are introducing that applies to the civil agencies?

Ms. RIVLIN. Yes, rather briefly.

Chairman ROTH. I would like to have your comments either today or subsequently in writing as to your recommendations on how you think it might be improved. What we are really trying to do is create a baseline from which Congress can work. One of my concerns, and

I would like for you to look at it from this standpoint, is that we do not want to create a lot of paperwork. For example, the current draft would mean that the executive branch would be required to report all State and local projects.

Take a UDAG where we might have made a $2 million grant to a $100 million project. I am not sure that it is in our interest to require that kind of paperwork.

In creating or establishing these requirements we want, No. 1, for these to be useful and not merely to be doing something that is not practical.

Second, we do not want to create a lot of new paperwork that will add to the process.

I would appreciate it if you would take time to look at the legislation and give us your advice.

Ms. RIVLIN. We will do that.

[The information referred to follows:]

CONGRESSIONAL BUDGET OFFICE COMMENTS ON S. 2397

The draft bill would stop the federal government from proceeding with any major civil acquisition that experienced cost overruns totaling more than 25 percent, after adjustment for inflation, unless the Congress enacted special legislation to authorize continued funding. The bill would require that the Executive Branch report quarterly to the Congress on the status of all major civil acquisitions. In addition, the bill would require a special report explaining cost overruns, whenever costs of a major civil acquisition grew by at least 25 percent. The bill defines a "major civil acquisition" as one involving more than $50 million in federal funds.

As I noted in my testimony, I certainly favor careful scrutiny of civil acquisitions along with those of DOD. This bill would provide a mechanism for achieving such scrutiny. My remaining comments concern the details of the proposed legislation.

In my testimony above, I suggested that the Congress consider making the Defense Department's Selected Acquisition Report (SAR) basically an annual report, with more frequent reports limited to major systems experiencing significant changes since the last annual report. The Congress may also wish to consider making major civil acquisitions subject to such annual reporting rather than to the quarterly reporting specified in the bill.

A threshold greater than the $50 million one now specified in the bill should be considered, at least for limiting the number of projects subject to the regular reporting requirements. As of September 30, 1981, well over 300 civil acquisitions involved more than $50 million in federal funds. For comparison, the DoD typical prepares SARs for about 50 of its acquisition programs. A higher initial threshold, indexed to inflation to prevent unintended future inclusion of lesser programs, would provide for a smaller reporting burden.

The draft bill requires that the Director of the Office of Management and Budget submit a supplemental cost-overrun report to the Congress whenever a major civil acquisition experiences cost growth, inclusive of inflation, of more than 25 percent. In contrast, the requirement of special legislation to continue funding applies only when the 25 percent threshold is breached, exclusive of inflation. It is unclear why the threshold is defined differently in these two cases. If the sole objective is to promote sound management by the agency administering the acquisition, then the Congress may wish to define the threshold in each case as being exclusive of inflation. Cost growth attributable to inflation is typically beyond the control of the acquiring agency, and thus is not indicative of managerial inefficiency.

The bill specifies that the regular report on each major acquisition include reasons for any cost growth exceeding 25 percent. The bill is silent on cost growth below 25 percent. It may be useful to require an explanation for all cost overruns in major acquisitions, even before the 25 percent threshold is breached. Such information may provide an early warning of high future overruns.

The bill does not specifically provide for mandatory review or funding cutoffs if there are further cost overruns in programs that have exceeded the initial 25

percent threshold and have received Congressional approval for continued funding. Similar legislation applicable to military acquisitions provides for subsequent mandatory review by the Congress. The present bill could, for example, require enactment of special legislation to continue funding whenever constant-dollar program costs increased by 25 percent and, subsequently, whenever constant-dollar program costs increased by any additional 25 percent.

The bill differs in other ways from the analogous legislation affecting military acquisitions. In that other legislation, all of the thresholds are in nominal rather than constant dollars; the thresholds are defined in terms of unit costs; different thresholds apply to total and to procurement costs. It is unclear that there is a good reason for all of the differences between the two sets of legislation. In some cases—such as the use of constant-dollar measures of cost overruns in defining thresholds for triggering special oversight—the proposed legislation concerning civil acquisitions may be preferable.

Ms. RIVLIN. Just briefly, I think one thing that might be considered would be to focus on cost growth that is not attributable just to changes in inflation estimates or to quantity changes. Those are the things that can be identified. But what you really want to focus on are the other sources of cost growth.

Chairman ROTH. Absolutely.

Thank you very much, Dr. Rivlin, for being with us today.

Ms. RIVLIN. You are welcome. Let us know if we can help you further.

Chairman ROTH. As I said, I would appreciate any further advice you have on this legislation.

Ms. RIVLIN. Fine.

[The prepared statement of Ms. Rivlin follows:]

PREPARED STATEMENT OF ALICE M. RIVLIN, DIRECTOR,
CONGRESSIONAL BUDGET OFFICE

Mr. Chairman, it is a pleasure to appear before your Committee today to discuss Congressional oversight of acquisition management in the Department of Defense (DoD).

Real cost growth in the acquisition of weapon systems continues to be large and to present budget and management problems. The dramatic increases in budget authority and outlays in the Administration's 1983 budget proposal highlight the need for a most careful Congressional scrutiny of procurement management. To facilitate Congressional oversight, the information that the Congress now receives about weapons acquisition needs to be, and can be, improved substantially.

My statement today will begin with an overview of the problem of cost growth in weapon systems. I will then discuss the most recent reports of Defense Department acquisition management, and will conclude with some suggestions about how the Congress can obtain better information about weapon system procurement.

HISTORICAL OVERVIEW

Cost overruns have plagued the weapons acquisitions process as far back as records go, and recent DoD management initiatives designed to curb cost growth are by no means the first such efforts. In fact, the attention paid to cost growth over the past three decades has apparently met with some success: net of

inflation and adjusted for quantity change, cost growth in weapon systems during the 1970s was only about half as great as that during the 1950s and 1960s. Nevertheless, the typical weapon system entering development today can still be expected to experience real cost growth totaling about 50 percent by the time the system is introduced into service.

Cost growth in weapon systems is a pervasive problem. No branch of service and no type of weapon is entirely immune. The Army's record, on balance, is slightly worse than that of the Air Force and the Navy. Because of the larger scale of their procurement budgets, however, the overruns faced by the Air Force and the Navy typically are larger in terms of dollars. Moreover, acute cost growth can be found in all types of weapon systems—aircraft, ships, tracked vehicles, missiles, command, control, and communications, and others.

The causes of cost growth vary widely. Unanticipated inflation accounts for the largest share of nominal-dollar cost overruns. Taken together, unexpected inflation in the costs of original programs, plus the inflation component of costs of program changes, have accounted in recent years for about 75 percent of reported cost growth, after adjustment for changes in quantity. Real cost growth is frequently caused by unforeseen problems in system development or production. Many systems

experience performance problems during the development phase, leading to costly engineering changes and schedule slippage. Changes in mission requirements often call for redesign, with concomitant cost increases.

Moreover, rapid inflation has negated much of the earlier success in reducing real cost growth. Dramatic increases in costs inevitably create funding problems leading to program stretchouts, inefficient production rates, and obsolescence of systems in the field. One reflection of these problems is that cost growth in real terms has again begun to rise, reversing the trend of the preceding three decades.

COST GROWTH IN THE LATEST SAR

Our most comprehensive and consistent data on costs are contained in the Selected Acquisition Report (SAR). The SAR is a quarterly status report to the Congress on major defense acquisition programs. It presents each system program manager's current "best estimate" of key performance, schedule, and cost goals; compares these estimates with baseline parameters established at the time the programs were approved for full-scale development; and explains all variances from the baselines. It reports on the progress and the problems in meeting designated performance, schedule, and cost targets of the programs. Cost and schedule data for each of the 45 to 55 weapon systems included in the SAR

cover the full period from the decision to proceed with full-scale development until the completion of planned procurement. For fiscal year 1983, the 47 SAR systems account for 48 percent of the Administration's overall defense procurement request of $88.7 billion. The SAR's voluminous documentation typically fills 900 pages.

The most recent SAR, that of December 1981, contains the largest quarterly increase in total SAR costs ever reported--$150.1 billion in nominal dollars, a 50 percent increase over the preceding quarter. The total cost of all SAR programs is frequently viewed as a measure of DoD's success in controlling cost growth in weapon systems; thus, the latest increase seems to suggest that weapon system costs are again accelerating out of control. More detailed analysis, however, shows that much of the reported cost growth stems from factors other than inadequate management.

New programs and additions to planned procurement accounted for 85 percent of the $150.1 billion total increase in the December SAR, as shown in Table 1. Two small systems totaling $1.3 billion were dropped from SAR. One program was added--the B-1B bomber, with a projected acquisition cost of $29.5 billion. The net increase in the SAR total cost from these changes was $28.2 billion, or 19 percent of the overall increase.

TABLE 1. SAR DOLLAR CHANGES FROM SEPTEMBER TO DECEMBER 1981
(In billions of nominal dollars)

Total Program Cost September 1981 (48 systems)		304.7
Changes September-December 1981		150.1
Programs Eliminated (2 systems)	-1.3	
Program Added (1 system)	29.5	
Net Quantity Change	99.2	
Net Cost Growth	22.7	
Total Program Cost December 1981 (47 systems)		454.8

Additional planned procurement quantities associated with the expansion of defense programs accounted for a further $99.2 billion, or 66 percent of the total increase. Two-thirds of this quantity variance reflects the cost of additional tactical aircraft. Large increases are also planned in ship and missile procurement.

The overall result of these program changes was to add $127.4 billion to the September SAR cost, or 85 percent of the total increase reported between September and December.

COST GROWTH IN EXISTING PROGRAMS

After these adjustments for system and quantity changes, the December SAR still reported an increase of $22.7 billion in the cost of 46 systems at the quantities programmed in the September SAR. Moreover, this cost growth is not spread evenly over all the SAR weapon systems. In some cases, the cost growth increases reported in the December SAR are far higher than the average. Table 2 shows the percentage increases in unit prices, and the effect on total procurement costs for the remaining years of the program, for several systems that had no quantity increases in the December SAR.

For these ten systems, the primary causes of cost growth fall into four categories: unanticipated inflation, schedule changes, estimating changes, and engineering modifications. For three systems, over 50 percent of the cost growth was the result of revised economic indexes. For six systems, estimating and schedule changes together caused most of the unit price increases. For one system, engineering changes accounted for 93 percent of the overall change in unit price.

Focusing solely on 1983, unit cost growth is even higher for selected programs. For the ten SAR systems shown in Table 3, the increases in unit prices between September and December 1981 led to an increase of $1.4 billion in 1983 budget authority. One

TABLE 2. UNIT PRICE INCREASES FOR SELECTED SAR SYSTEMS AND THE EFFECT ON POST-1981 TOTAL PROCUREMENT COSTS

System	Procurement Unit Price Increase (percent)	Increase in Post-1981 Total Procurement Costs (millions of nominal dollars)
Pershing II Missile	93	1,022
Defense Satellite Communications System	65	500
AH-64 Helicopter	54	1,329
AIM-7M Sparrow Missile, Navy	38	322
NAVSTAR Global Positioning System	28	294
Maverick Missile, Air Force	17	659
AV-8B Aircraft	17	1,405
Fighting Vehicle	17	1,621
F/A-18 Aircraft	15	4,383
HARM Missile, Air Force	14	486

NOTE: Increase from September to December 1981.

TABLE 3. UNIT PRICE INCREASES FOR SELECTED SAR SYSTEMS AND THE EFFECT ON THE 1983 PROCUREMENT PROGRAM

System	Procurement Unit Price Increase (percent)	Decrease in 1983 Buy Size (percent)	Increase in 1983 Budget Authority (millions of nominal dollars)
HARM Missile, Air Force	152	74	97
Pershing II Missile	120	32	272
Phoenix Missile	104	60	127
AH-64 Helicopter	73	38	348
AIM-7M Sparrow Missile, Navy	42	43	40
AV-8B Aircraft	40	25	204
HARM Missile, Navy	39	16	50
Patriot Missile	35	34	211
AIM-7M Sparrow Missile, Air Force	25	9	39
Maverick Missile, Air Force	18	30	51

NOTE: Increase from September to December 1981.

feature common to all these systems, which contributes greatly to their large percentage increases in unit prices, is that the planned procurement rates were lowered between September and December.

The data in the foregoing tables suggest that there are still areas of substantial cost growth. The Administration has taken several steps, however, to control acquisition management within DoD, and some favorable evidence of these efforts is apparent in the December SAR.

In press releases accompanying the President's budget in February, the Administration claimed SAR system savings of $4.2 billion resulting from improved acquisition management. Specific initiatives cited included economic production rates, multiple-year procurement, elimination of marginal programs, and selection of lower cost alternatives. Unfortunately, as reported in the December SAR, these savings are offset to some extent by schedule delays and program stretchouts, which caused a $3.9 billion increase in program costs.

CBO reviewed the four 1981 SARs to determine whether the savings claimed by DoD appeared in the SAR tabulations. The SAR data revealed savings of $5 billion--$800 million more than the Administration's total.

While these amounts are similar, however, there was substantial overreporting or underreporting for individual systems. The

SAR substantiated DoD's claimed savings of $2.3 billion for a group of seven systems. For six other systems, however, DoD claimed five-year savings of $1.5 billion, but only $300 million could be supported on the basis of SAR data. And in eight further systems, the SAR reported savings of $1.9 billion, but DoD claimed only $400 million.

We are concerned that the SAR, which is our best source of information about DoD acquisition programs, does not contain data adequate to enable us to review the Administration's claims of management efficiencies.

OTHER PROBLEMS WITH SAR DATA

In addition to the Administration's efforts to control acquisition cost growth, DoD itself has taken steps to improve SAR reporting. Several points should be made, however, about the accuracy of the current SAR in assisting the Congress to evaluate weapon system cost growth.

A persistent problem in the SAR is the treatment of unanticipated inflation and its effect on program cost. DoD has improved its inflation accounting in the December SAR by employing disaggregated inflators for different types of systems. And by forecasting that the inflators will increase at higher rates than the overall GNP deflator, DoD has enhanced the realism of its budget projections.

Our review found, however, that program managers continue to have difficulty in accurately applying the inflation rates prescribed by the Office of Management and Budget (OMB) and the Office of the Secretary of Defense (OSD). For example, four systems have inflation computational errors totaling $4 billion. Many other systems have errors of a lesser order of magnitude.

A related problem concerns the level of projected inflation. OMB/OSD projections of inflation have been revised upward since the September SAR, bringing them more nearly in line with CBO inflation rate projections. Nonetheless, application of these new OMB/OSD projections still results in underestimation of system costs in comparison to the CBO rates. Use of the CBO inflators would add a total of $15.5 billion to DoD's projections in the December SAR.

Indeed, the extent to which the December SAR understates inflation costs may be greater than $15.5 billion. The CBO review turned up 14 systems whose total estimated program costs were arbitrarily adjusted downward "due to refinement of estimate to offset new economic indices." In essence, this action means that for these 14 systems, SAR program cost was further understated by $3.4 billion.

IMPROVING THE SAR

The SAR clearly provides a great deal of useful information about specific systems and the overall management of weapons

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acquisition. There are, however, a few changes that could greatly enhance the utility of the SAR without imposing additional paperwork requirements.

Annual Reporting

Although the SAR currently is compiled quarterly, the preponderance of changes are reported only annually, in the December SAR. The Congress certainly needs to receive early notification of changes in system status, but this does not necessitate quarterly reproduction of the full SAR, replete with detailed system descriptive data. The Congress might still be well served if the full SAR was compiled only annually, in phase with preparation of the President's budget, as long as DoD continued to report changes quarterly. This change would still provide timely notification of significant changes in system status, but would save compilation time and cost.

Noncomparable Base Years

For each major weapon system, the SAR currently reports estimates of program costs in both nominal and base-year dollars, the latter computed with reference to the year when the system entered full-scale development. This use of scattered base years has several adverse effects. It distorts comparisons of real cost growth experienced by programs with different base years. Perhaps

more important, inflation becomes the dominant source of cost increase for programs with very early base years, thus making increases resulting from acquisition mismanagement and inefficiency seem insignificant. These problems could be solved by inclusion in the SAR of constant-dollar cost estimates calculated each year in that budget year's dollars.

Criteria for Inclusion

At present, a system qualifies for inclusion in the SAR if it has planned development costs over $75 million or procurement costs over $300 million. The Secretary of Defense may, however, exclude any eligible acquisition program if he determines that it is not a "major program." Since the number of eligible systems far exceeds the 45-55 that typically appear in the SAR, the Secretary has in the past felt obligated to exercise considerable discretion. In some cases, the selections may appear arbitrary, as when the B-1B bomber was excluded from the September 1981 SAR. To avoid this problem, the Congress could modify the selection criteria. One approach would raise the dollar thresholds for eligibility, index the new thresholds to forestall unintended future inclusions, and eliminate the authority for secretarial discretion.

Variance Reporting

The SAR apportions cost changes into seven categories: economic, quantity, schedule, engineering, estimating, support, and other. Although these categories provide a complete accounting of cost changes, they do not always illuminate the reasons for cost variances. Several additions to the variance report should be considered.

Engineering Changes. The SAR should indicate whether engineering changes result from modifications to upgrade system performance, or whether the changes are needed to meet performance objectives as set forth in the development estimate. If upgrades are the reason, the SAR should identify the changes in mission requirements that justify the modification. If engineering changes are required merely to meet the development estimate objectives, the SAR should discuss the related shortfalls in performance that necessitate the change.

Schedule Variance. Several studies of real cost growth conclude that a major factor is funding limitations, which lead to stretchouts and inefficient production rates. But another source of schedule slippage may be equally important--development problems that delay the transition to the production phase. At present, the SAR does not distinguish systematically among these or other causes of schedule change, although occasionally there

are references to funding cutbacks as causes of schedule variance. As with engineering changes, the schedule-related cost variance should be identified in the SAR as stemming from some underlying cause: funding, development problems, mission change, or any other.

One aspect of schedule variance is the cost of changing from the economic buy size. The Defense Department has identified economic buy size as one of its principal management initiatives. The SAR needs to show the economic buy size for each system, and to show the cost of deviating from that procurement rate. Only then will the Congress be able to make well-informed decisions about funding levels for different systems.

Supporting Documentation. Detailed analysis and validation of the SAR currently are precluded by the unavailability of backup data. These data obviously exist, for without them preparation of the SAR itself would not be possible. The Congress needs to ensure its access to backup worksheets, with proper safeguards for proprietary contractor information, in order to permit across-system and over-time analyses of the acquisition of individual systems. The SAR itself should contain enough of this information to permit validation of the calculations leading to the reports on cost variances. This would militate against inconsistent procedures and arbitrary assignment of cost increases to variance categories.

CONCLUSION

The problems I have mentioned with regard to the SAR, and the improvements I have proposed, should not be viewed as a panacea for the ills of acquisition management. As many others have written and testified, the acquisition process suffers generally from distorted or inadequate incentives. Program managers frequently strive to complete or upgrade systems without primary reference to cost. Contractors often compete to win awards even at the cost of deliberately underbidding, in the hope of profiting from follow-on work. And the military services may distort their evaluations of system importance in efforts to win larger procurement budgets.

Solving these problems, and improving the incentives of participants in the acquisition process, is primarily the responsibility of the Defense Department and its budget, contract, and program officers. The Congress can help by ensuring that it has up-to-date, accurate information, and by sending DoD the clearest possible signal, through hearings such as this, that the principal Congressional objective is efficient acquisition of essential systems. The proposals I have made today are intended only to improve the information available to the Congress as it pursues this goal.

Chairman ROTH. At this time, I would like to call Mr. Jack Borsting, Assistant Secretary of Defense (Comptroller).

Mr. Borsting, I would like to welcome your appearance before this committee today.

I am concerned about the perceptions that appear to be developing with respect to the Department of Defense.

Frankly, it was not quite 2 years ago when I warned some of the top team when they appeared before this committee that there was a consensus of support for defense but it was a very shallow one and if they weren't careful that consensus of support was going to evaporate.

To be very candid with you, I think tragically that is happening. There is a general perception, not only among the Members of Congress, but at home, that costs are not a matter of concern to the defense establishment, that they are running way out of control, and the Department of Defense is not being up front with respect to requests.

I am not passing judgment on this, but I think it is a fact of life that has got to be faced and that it is critically important that the Pentagon be up front in its dealings with the General Accounting Office by supplying the basic information with consideration to secrecy.

I do think we want a free flow of information, and essentially Congress is entitled to the basic data that will enable it to decide whether the projects are proceeding in a satisfactory manner.

Having said all that, I would ask you, if you can, to summarize your statement. All statements will be included as if read.

Of course, we would be pleased if you would introduce the gentlemen who are accompanying you.

TESTIMONY OF JACK R. BORSTING, ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER), DEPARTMENT OF DEFENSE, ACCOMPANIED BY WILLIAM LONG, DEPUTY UNDER SECRETARY FOR ACQUISITION MANAGEMENT, AND JOSEPH T. KAMMERER, DEPUTY ASSISTANT SECRETARY FOR COST AND AUDIT

Mr. BORSTING. Thank you, very much, Mr. Chairman.

It is a pleasure to testify before this committee.

Let me introduce two members who are with me at the table from the Defense Department.

Bill Long, who is Deputy Under Secretary of Defense for Acquisition Management and works for Dr. DeLauer in the acquisition area.

Mr. Joe Kammerer, who is Deputy Assistant Secretary for Cost and Audit. Joe works for me and is in charge of the SAR reports.

I am very happy to have both Bill Long and Joe Kammerer here today to assist me in any questions on my testimony.

I want to talk today about the development of cost estimates for major weapons systems and also initiatives to reduce the cost of weapon systems in the Defense Department.

We send, as you know, several reports to the Congress on major weapon acquisitions costs. In fact, we send the same information in various different reports.

One of the information reports is the Selected Acquisition Reports (SAR's), which have summarized major weapon consts since 1969. The SAR's include both program and unit costs and unit costs in constant dollars and then year dollars.

They also track all program changes from the base line estimate made when we entered into full-scale engineering development.

Although we should be able to estimate the development costs, including a reasonable amount for technological risks at this time, it is still very difficult to estimate production costs in the future, especially when one has to protect against inflation for those systems that may take 8 to 10 years in development and another 5 to 10 years in procurement.

The SAR is not a decision document since it tracks costs after the fact. There have been complaints that it is too comprehensive, complex, and difficult for the layman to read. In fact, Senator Cohen mentioned some of its complexities. We also would like to simplify it. In fact, Dr. Rivlin made some excellent suggestions, I believe. I would like to endorse some of her suggestions she made in her statement. One is reducing the frequency of the SAR to once a year. The in-between SAR's just are not relevant because they do not reflect the decisions made during the PPB system and budget that has to be estimated in December.

We will be happy to submit flash reports on a quarterly basis to give Congress more information. But I firmly believe that having to do four detailed, voluminous SAR's a year leads to inaccuracies in SAR's and leads to people treating them at the working levels to lightly. I don't think this helps the Congress in their oversight management.

Also, several other of Dr. Rivlin's suggestions, I think, have merit, and we will be working with her staff on these suggestions.

As you know, we also send to the Congress unit cost exception reports from major weapons systems. If we have a 15-percent increase, the service secretary sends a report to the Congress, including plans to control future cost growth. If we exceed a 25-percent threshold, the Secretary of Defense must certify that the weapons system is still necessary. We also submit many other reports such as the R.D.T. & E. descriptive summary for those programs in development; also, the congressional data sheet for those weapons in production. For the 1983 budget, 500 R.D.T. & E. summaries and 142 congressional data sheets were prepared for weapons systems programs and were sent to the Congress.

Cost estimates for major weapon system acquisitions are developed in support of two very difficult and closely associated management processes. The Defense Systems Acquisition Review Council, or DSARC, and the planning, programing, and budgeting system, PPBS. The DSARC has three milestones at which program cost estimates are prepared.

At milestone 1, the Secretary of Defense decides to commit resources for advanced development. The planning estimate developed at this time is only for the purpose of making decisions among alternative candidates of generic systems.

These generic systems are not well defined enough to make a cost estimate worth tracking until milestone 2, which is the start of full scale engineering development. I believe that some of the cost estimate comparisons that were in the GAO report that we are discussing today were planning estimates, not full-scale engineering development estimates.

I firmly believe, and I think my colleagues in the Defense Department believe, that we should be tracking a base line estimate that starts at milestone 2 or full scale engineering development.

There are just too many uncertainties with regard to what the weapons system will be at the early planning stages. At milestone 3, when we make a decision to enter production, the technical characteristics of the program are usually well defined and the tracking of cost growth becomes more meaningful.

On the average, about 3 to 5 percent cost growth annually occurs because weapon systems are in production for such long periods of time. The 3 to 5 percent compounded annually can turn out to be a fairly high number in current dollars. This cost growth includes, of course, the impact of inflation.

As you might suspect, the methodology for cost estimating becomes more refined and more detailed as the weapon system becomes better defined in the acquisition process.

Initially, only parametric estimating is feasible. That is, comparison of similar systems using parameters such as physical characteristics—weight, speed, and range—to make your estimates.

When you have more data, you can use industrial engineering techniques which are more of a bottoms-up approach to weapons systems costs. In addition, we have several estimating procedures, the program managers cost estimating procedures, the independent cost analysis procedures of the services, and the CAIG estimating procedures. All these different procedures involve either parametric estimations or what I might call again the industrial engineering or grass roots approach to cost estimating. We require that the services submit to the Department of Defense not only program managers' estimates, but also the independent cost estimates of the services.

Before we have a DSARC where we make major decisions on milestones, the CAIG, the Secretary's independent cost group, makes an independent cost estimate to the services. Many times the services go back after working with the CAIG and revise their estimates. The final cost estimates are submitted to the Congress.

The management process by which DOD develops a 5-year plan and culminates in the presentation of the President's defense budget to the Congress each year is closely associated with the DSARC process and the development of weapons systems cost estimates.

It is during the programing phase of the PPBS that the military services update their cost estimates in the program objective memorandum. The acquisition improvement objectives, the so-called 32 Carlucci initiatives, includes a closer linkage between the DSARC process and the PPBS process through budgeting the most likely cost and by making greater use of service-independent estimates during the PPBS process.

These initiatives should significantly contribute to controlling cost growth in weapons systems in the future.

Let me also caution, budgeting most likely costs will certainly not eliminate cost overruns but should minimize both the frequency and the dollar amounts.

Cost growth in weapons systems, of course, is of great concern to all of us, but we many times do not define cost growth properly.

Table 1 in my statement, which I won't go into in detail, gives an example for the F–15 aircraft.[1] The original program increased in quantity from 749 aircraft to 1,415. Naturally, this quantity increase will reflect additional costs, but is this uncontrollable cost growth?

Also, inflation plays a significant role. This is why we track cost growth in base year dollars.

For the F–15 case, when the estimate is adjusted for quantity, the base year cost growth is 39 percent where the current year cost growth including inflation is 68 percent, a significant difference.

If no adjustment for quantity had been made, the apparent cost growth would have been inappropriately calculated as 449 percent, just like an apples and oranges comparison. For all the major weapons systems reported to the Congress in the SAR's, the base year cost growth is 24 percent and current year cost growth is 58 percent.

Table 3 in the prepared statement shows a track of cost gowth percentages in the SAR's since 1975.[2] Unanticipated inflation was the single major factor contributing to cost growth ranging from between 67 and 85 percent of the total.

While the acquisition improvement program consisting of the 32 Carlucci initiatives are directed in a significant way to controlling cost growth, four of the initiatives are directed toward producing better base line cost estimates.

I believe we have made significant strides in budgeting more realistically for inflation by considering a defense commodity index directly related to defense goods and services.

Dr. Rivlin mentioned this new estimate of inflation in her testimony. She also mentioned a $4 billion computational error. Now I do not think there is a computational error. In fact, after this hearing, I will sit down and talk with Dr. Rivlin's staff. I believe that there are two different ways of computing the additional inflation. One bottomsup way from the base line estimate and another way, a top-down way, from the current estimate. My staff and Dr. Rivlin's staff have not talked about this before, but I believe it is just a different way of computing inflation and not a computational error.

I would like to comment about the inflation indices. We are using the Department of Commerce time series for four commodities: track vehicles, ships, missiles, and aircraft. This series uses past defense purchases and the administration's economic projections to forecast for the next 5 years the acquisition cost of these major weapon systems. This has added $39 billion to the 5-year defense plan over what it would have been if we had been using the GNP deflator, which had been the methodology used in the past.

Many of the other Carlucci initiatives are also related to cost control and cost management. I won't go into these at this time because I believe Secretary Carlucci discussed many of these initiatives with you last fall.

This concludes my informal remarks and summary of my statement, Mr. Chairman. I will be happy to answer any questions.

Chairman ROTH. Thank you, Mr. Borsting.

I guess one of the things that troubles me, we seem to have some of the brightest and able people in the Department of Defense that are trying to do the right thing. Notwithstanding that, the history of

[1] See p. 79.
[2] See p. 84.

overly optimistic initial estimates does not provide an accurate or reliable base upon which this Congress is to act. Many people believe these original estimates deliberately reduce the different projects on line.

Why is it so difficult to get some realistic base line?

Mr. BORSTING. It is a very complex process, as you know. Let me give several reasons. One, I think is that in the past there has been some estimates of low balling, which is the short name for what you are calling giving the estimates.

Chairman ROTH. What was the expression?

Mr. BORSTING. Low balling. The Carlucci initiatives aim to prevent this. We have strong management controls now using both the independent cost estimates of the services and the CAIG to prevent low cost estimates.

We have also increased the budget for 1983 by a significant amount of dollars in many of the major weapon systems to budget the more likely cost. We are trying to do a better job and I think we will do a better job.

The general area, though, of cost estimation is a very difficult thing to do. Two methods that I talked to you about earlier, parametric cost estimation and the industrial engineering bottoms-up approach is very difficult to do for a high technology system. There are times where you just cannot predict what will happen very well to your cost estimates.

The Carlucci initiatives are to have the services estimate cost risks for their high technology programs.

Inflation has been a very big item. Approximately 75 percent, as I mentioned in my testimony, of cost overruns have been due to inflation. This is particularly true of the Department of Defense when we fully fund our systems and say, for a nuclear carrier, we estimate inflation for the next 6 years or more because the outlays of the carrier will extend over that period.

All administrations have estimated inflation going down, what I might call glide path economics, which is what we would want it to do. Well, when this doesn't happen, the Department of Defense is hurt more than any other department in the inflation category because of estimating inflation 5 or 6 years in the future. This was another reason why the President in the 1983 budget decided to have separate indices for ships, missiles, truck vehicles, and aircraft that would more realistically reflect these purchases in the future.

But when you talk about 75 percent of our cost overruns being inflation, that is a very significant amount.

Chairman ROTH. I fully understand the problems of dealing with inflation. I also can understand the problem that in many cases you are dealing with scientific breakthroughs. You are at the very edge of new developments that make it much more difficult than, in the case of construction of an office building. Despite that, the perception is that the Department of Defense has been deliberately underpricing its projects.

If you take all the major systems—not only those on SAR but those that are not—is it your best estimate that the total cost of these are fairly precise? There have been some statements in the press, for example, that if you have the realistic figures of the Pentagon on major weapons and other acquisitions, that it amounts to billions and billions more.

Mr. BORSTING. No, it is my belief that we are at this stage estimating the cost of future weapons systems in a very professional way. I think Bill Long, the Acquisition Deputy Under Secretary might like to elaborate on that.

Mr. LONG. I think there has been a very determined effort in expressions to inject into the system the notion of realistic cost estimating. It is a problem, as has been described, that pervades the history of DOD acquisition with respect to everybody involved, as you observed earlier, the Congress, the Department, the contractors. But in keeping with the commitment to develop our decisionmaking process dealing with the best and most honest information that we can, I think there is a very active program to instill in the entire system within the Department the need to include technological risk assessment in the estimates to include in the estimates the best inflation figures that we can and a half dozen other specific items to build up to a more realistic cost estimate, knowing that it is a projection in the future and, therefore, somewhat precise, but using the best information we can use, we have available at the time we make the estimate.

Chairman ROTH. It is my understanding that many major systems, for example, the MX missile, are not on the SAR because the Secretary of Defense decides what is to be included on the SAR.

Why shouldn't all programs be included?

Mr. BORSTING. The MX will be included in the September SAR. This will be the stage where there will be full-scale engineering development. This has been our general ground rule. The B–1 was included in the December SAR as Dr. Rivlin mentioned. It was one of the additional amounts that added to the total amount.

Chairman ROTH. Let me ask you this question: Are we phasing these in at too late a stage?

Mr. BORSTING. In my view, I think that we should continue to phase them in at roughly Milestone 2 which is full-scale engineering development.

Chairman ROTH. That is where you have really begun the basic engineering design?

Mr. BORSTING. You are starting to do it. But in the early stages you are just in the planning stage, you haven't defined your system at all and your cost estimates are very imprecise. In fact, I think the GAO statistics that you had on the graph there for defense are planning estimates very early in the process at Milestone 1, not at Milestone 2, which is the comencement of full-scale engineering development.

Bill, do you want to comment?

Chairman ROTH. Let me inject what you are saying is that Congress is authorizing on the basis of your planning estimates; isn't that correct?

Mr. BORSTING. For exploratory development in early R&D and exploratory development, that is true. These estimates are basically used to compare roughly the cost at that time of competing systems but the parameters are not fully defined and it is very difficult to get a precise estimate at that time.

Chairman ROTH. But in many cases, these weapons systems are being authorized at an earlier stage?

Mr. BORSTING. Certainly development money, but the Congress still has time to stop the system in exploratory development and also before

the system goes into production, most of the money is expended once it is into production.

Chairman ROTH. The problem is, and I think there is a lot of truth to the idea that once a system has been funded it is very difficult to stop funding. It has a life of its own. Aren't we making our basic judgment perhaps at too early a stage. Are you suggesting that?

Mr. BORSTING. What exactly do you mean?

Chairman ROTH. For example, didn't we authorize proceeding with the B–1 last year prior to it being at the stage where there were realistic base-line figures? The same is true in the cast of the MX.

Mr. BORSTING. Remember, we had a SAR for the B–1 but it was canceled by a previous administration. The B–1 was canceled.

Chairman ROTH. I am talking about the recent one.

Mr. BORSTING. But this was just started this fall and we are defining things this fall—I should say this summer and fall, and as soon as hings were defined, we put the B–1 in the SAR. The B–1 was not an acquisition program at all until it was proposed to the Congress this year.

Mr. LONG. If I may take that one step further, the program was reconstituted in the quarter ending December 31, 1981, and is included in the SAR's as of that date. So it came into the SAR system exactly where one would expect it to.

Chairman ROTH. Let me go back to the B–1 issue for a moment. It is my understanding that the Department of Defense has several estimates, one of which would show that the plane may cost much more than the $20.5 billion figure given to the Congress last year. Is it true that the CAIG estimate for the program, for example, is $28.5 billion and that other internal estimates are even higher?

Mr. BORSTING. The Department has one estimate now which we believe is accurate in 1981 dollars for R. & D. and procurement of the B–1 system. During the process of deciding on the B–1, there were several estimates. There was the independent cost estimate and there was also the CAIG estimate of various portions.

Secretary Carlucci, in working with the Air Force and various staffs and his staff, my shop, Bill Long's shop, looked at the various estimates and directed certain costs added. You may remember that one of the initial estimates in 1981 dollars of the B–1 was $19.7 billion. One of the things Secretary Carlucci directed was that the rotary launcher, which was an additional cost of $800 million, be added to this.

That raised the cost to $20.5 billion in 1981 dollars. There are also other things that people said might be added to the airplane. Secretary Carlucci said no, they will not be added to the airplane. The design was frozen so certain things that were costed both by the program manager and by the independent cost estimate and the CAIG estimates are not going to be included in the B–1.

The total estimate, say, the CAIG estimate and the independent cost estimate, even the initial project manager estimate are not the correct estimate at this time because it is a different airplane. I should also mention that the Secretary and the Deputy Secretary and the staff of the Air Force are holding two meetings a month reviewing the progress of the B–1. I attend these meetings every 2 weeks. At the moment, everything is on schedule. As a matter of fact the cost of the

program is under the planning costs, using the $20.5 billion figure in 1981 dollars.

Chairman ROTH. Are you familiar with the problem GAO is having in obtaining some of the information?

Mr. BORSTING. Yes; I am.

Chairman ROTH. Are you involved in that process?

Mr. BORSTING. Yes; I am.

Chairman ROTH. I think you heard several of us express the very strong conviction that the information they are requesting should be made available to them. Are you able to comment on that today?

Mr. BORSTING. Yes; I will be happy to comment. One, I think it is very important—this is one of the things you mentioned—that the Secretary of Defense have candid and unbiased advice, that people feel free in giving him advice, at all times, and I don't think all of this should be made public. It will, I believe, make the internal management process of the Pentagon much more difficult to do, if that is the case.

Second, the CAIG estimates weren't really the estimate of the airplane we are building, so they would be very misleading. I also mentioned the controls. Now, we will try to work with Congress, we will try to work with GAO.

In fact, Senator Levin has requested—we received a letter hand-delivered last night requesting the cost estimates for some of the CAIG cost estimates. We are working on his request and will try to supply Senator Levin and your committee with the relevant cost estimates of the B–1.

I should also mention we would be very happy to have the project manager, General Thurman, come over and brief any of your staff, any of the committees on the B–1 costs.

Chairman ROTH. Let me interrupt and say what I am really interested in. The General Accounting Office is a watchdog, they have the expertise. I think it is important they have the kind of information they need to make their evaluation which includes the CAIG.

Mr. BORSTING. Well——

Chairman ROTH. Let me continue. I would also point out these are people with expertise. The planes have been changed. Presumably GAO is qualified to understand what is and what is not pertinent. So I don't find that as a reason not to supply the information. Now, I did make a comment and I stand by it, that I think there ought to be free-flowing discussions within the Office of the Secretary, just as there are in my office or elsewhere. But I would assume there is no reason that this couldn't be separated from the basic information that is necessary.

Mr. BORSTING. I think that is a very important thing to preserve, the free flow of information.

Chairman ROTH. Under no circumstances can that be used as grounds or coverup for not supplying information. That is something this committee has dealt with for 50 years and I have always protected that right because I think it is a critically important one, but it also can be used as a grounds of rationalization or excuse for not supplying anything. Congress is entitled and will secure the basic information they need. That is our job.

We are the policymakers here, and we will decide what information is essential for us to have. I will make sure, to the extent I can, and

I am sure that the rest of the committee will agree with me, that secrecy or security is a critical factor and we don't want anything to be disclosed that would endanger classified information.

We also feel very strongly that the management team has got to be able to say freely what they think without being subject to criticism for their best thoughts on a matter.

I want to underscore again neither of those are any grounds for preventing Congress and the appropriate committees, particularly the GAO, which is a professional group, to analyze these figures. So I would hope this can be worked out in the next several days.

Mr. BORSTING. We appreciate the interest in Congress of obtaining information to do their oversight function and we will try to cooperate as best we can and give the Congress as much information as they want.

Let me also make a comment: With the GAO, we will be happy to have them sit down with our project manager of the B–1 project and General Thurman and look at all those cost estimations for all components of the B–1. It is difficult for me to understand why an organization of 5,000 people with a great amount of expertise in the cost estimating area, could not look at the data that General Thurman has and our numbers and not come to a conclusion that they think these numbers are reasonable for the various components or not.

Chairman ROTH. My only comment on that is the GAO is responsible for determining how they proceed as an independent agency. We, of course, expect them to use their independent judgment. We are going to have to bring this to a close relatively soon.

Tom?

OPENING STATEMENT OF SENATOR EAGLETON

Senator EAGLETON. Thank you, Mr. Chairman.

I will subscribe to the policy as you just annunciated in the context of the B–1. I wish to identify myself with your remarks thereon. I have a specific question for Mr. Borsting, but in order to propound it, I will take 2 or 3 minutes to lay the predicate for it but I will get to the question.

The chairman has been pursuing the B–1 as a worrisome situation insofar as cost growth, and so forth, and, indeed, the woods are filled with other illustrations, worrisome illustrations, as well.

For example, the subject matter that for more than 10 years has been an interest of mine, the tank.

I was very active back in it, I guess it was the very late 1960's and very early 1970's in terms of analyzing the cost overrun of the MBT 70 tank. That is what the new tank was called back then.

Finally, that tank was canceled because the costs had gone off the well. And so a new tank called the M–1 was conceptualized and it was to be the sleek, slim cost-effective, cost-efficient tank.

Well, now we know through GAO, as the chairman has pointed out, and through the Congressional Research Service, the M–1 itself costs have exploded instead of being $1.9 million per copy, it is now up to $2.7 million per copy and growing, and both the GAO and the CRS—Congressional Research Service—have pointed out a whole host of problems with the tank as to its reliability, its maintainability, its durability, its fuel consumption, and the like.

That is one example.

Another one very currently in the news is the F–18 made cooperatively by Northrup and MacDonald Douglas. It, too, from a cost-growth point of view, has been the subject of a very recent GAO report dated February 26, 1982, entitled "Navy's F–18 Expected To Be An Effective Performer But Problems Still Face the Program."

It goes into the problems, and at the bottom of page ii, the GAO has some very critical things to say about the cost growth of the F–18. I have an article here dated April 18, 1982, "Committee Buzzing About Hornet Cost Hikes."

In the body of the article it says,

> The Senate Committee blamed subcontractor Northrup Corp. Friday for persistent cost problem in the Navy F–18 light weight fighter plane project.
>
> The Senate Armed Services Committee suggested transferring the subcontract to another aerospace company "if more immediate measures to impose cost discipline are not successful."

And yet another, this is the one about which I will ask my specific question, the Apachee Helicopter. It's been singled out for criticism by the Senate Armed Services Committee. Funds for the fiscal year 1983 budget were denied and the report of the Committee on Armed Services of April 13, 1982, at page 41, and so forth, has some very critical things to say about the cost overruns, or the cost growth of the Apachee Helicopter. So that leads me to my question, Mr. Borsing, and you can elaborate as much as you care in your answer.

If you wish also to comment on the previous two that I mentioned, the B–1 and the F–18, that is fine with me also, but my specific question is on the Apachee.

To what extent does the rush to justify procurement costs of programs not fully developed come back to haunt the Department in terms of program rejection or program reduction?

Mr. BORSTING. Basically, are you asking, if we go into production too fast? How does that affect cost?

Senator EAGLETON. The way I phrased my question was a rush to judgment, a rush to justify procurement costs of programs not fully developed, does that rush come back to haunt the Department in terms of programmatic problems with that given weapons system, costs that were not fully analyzed and anticipated and does not that rush really hurt you in the long run because it causes a committee like the Armed Services Committee to reject the program?

Mr. BORSTING. Certainly—if I interpret your question properly—certainly if one estimates production costs too early and if there are changes made so these production costs are not realistic, it does hurt the Department.

Senator EAGLETON. So it is fair to say that with respect to tne Apachee that the Department has learned a lesson?

Mr. BORSTING. Let me let Bill Long answer that.

Mr. LONG. As Dr. Borsting said, we can create problems— and the "we" is not just the Department of Defense, but anybody buying a system in the course of its development—as an acquisition strategy early in the development of a program, the Department secures production options that have defined times.

Now, perhaps that is not a good acquisition strategy. But there is, once there exists an option with a fairly firm price, and even if it is a fixed price incentive option some internal motivation to exercise

that option before it expires because if the option does expire and there is a complete renegotiation, there is concern that the cost will be higher.

I cannot tell you, because I don't have the data, whether our estimates are that we benefit in the long run even though we create some problems for ourselves. I am trying to give you an illustration of what some of the motivations during production are.

Mr. BORSTING. I might elaborate on the three systems you mentioned with regard to numbers. If I look at AA–64, in base year dollars, since the program started, the present change has been 39.5 percent increase in base year dollars.

Senator EAGLETON. What program are you talking about?

Mr. BORSTING. The Apachee, AA–64, in current dollars, though, it has been 130 percent. A lot of it has been inflation. And the M–1 tank, the increase in base year dollars has been 44.7 percent, or 65 percent in current dollars; with inflation, 105 percent.

These are, by the way, all adjusted for quantity. And the F–18 percent change adjusted for quantity is 27.6 percent for base year dollars and 101 percent current dollars. These are all adjusted for quantity now.

Senator EAGLETON. Thank you.

Chairman ROTH. Senator Levin?

Senator LEVIN. Thank you, Mr. Chairman.

Yesterday I wrote the Secretary of Defense requesting that you bring with you today the CAIG reports and the ICA reports and the backup data, and my first question is whether or not you brought that data with you.

Mr. BORSTING. I did not, Senator.

Senator LEVIN. You have indicated that the relevant costs should be made available to us. Do I understand by that statement that you believe that the DOD should make the determination as to what is relevant rather than the GAO?

Mr. BORSTING. Let me elaborate.

I did talk about the B–1 before in answer to one of Senator Roth's questions, that we did have an independent cost estimate of the B–1. We of course had the project manager's cost estimate. We also had the CAIG cost estimate. There was much discussion and the plane configuration was defined. Various items were left off the plane.

Secretary Carlucci will be happy to supply these documents, for example, to you, specifying various items being added, various items not being added.

As I mentioned earlier, we added $800 million for the rotary launcher and then froze the design of the B–1. So many of these earlier studies are not that relevant because we are talking about a different airplane than we are actually building.

Senator LEVIN. Are not relevant in your opinion?

Mr. BORSTING. That is correct.

Senator LEVIN. Or they are not being charged to the airplane; is that right?

Mr. BORSTING. Well, no. We are quite explicit and will be happy to show you and have the project manager sit down with you and your staff and discuss exactly what is with the airplane and is not with the airplane.

Senator LEVIN. My question is this: If it is not with the airplane, obviously the GAO is just as capable as you are to say it is irrelevant.

But you are still, in your view, going to make the decision as to what is relevant and what isn't relevant, and you won't give GAO the option of even——

Mr. BORSTING. No, no, we will be happy to sit down with the GAO and tell them exactly what is in the $20.5 billion estimate.

Senator LEVIN. The question is this: Let's try to get right down to it. The question if whether the CAIG report and the ICA report and backup data are going to be made available to GAO.

You say relevant data will be made available. Presumably your answer to my question is not, not all of the CAIG report, ICA report, and backup data will be made available. You are going to leave out what you consider to be irrelevant. The question is, why don't you show GAO the data and show them why some of it is not relevant and let them decide whether or not it is relevant?

Mr. BORSTING. Well, isn't it fairly obvious that if something is not included in the airplane, that you don't want it added to the cost of the airplane?

Senator LEVIN. That is so obvious, I think the GAO will see that in a moment. A lot of decisions that are not relevant are not so obvious.

DOD has not charged to the airplane a number of items which in many people's opinion should be charged to the airplane.

Mr. BORSTING. What specific items are you concerned about?

Senator LEVIN. I cannot remember the specifics now, but there are a number of items which are separated out of the $20.5 billion cost estimate which are being put into different costs, more generalized cost accounts—I think you are familiar with them—and not being directly attributable to the airplane. If something is not relevant and obviously not relevant, is the GAO not capable of making that decision as much as you are?

Mr. BORSTING. Certainly.

Senator LEVIN. Why not show them the data and tell them it is not relevant rather than what you are going to show them or not going to show them?

Mr. BORSTING. What we would like to do to meet the requests of the Congress and still try to preserve the candor and integrity of our internal management system is to work with you and supply you with the information that I think you need.

Senator LEVIN. That you think we need rather than information which exists that GAO thinks it needs. That is the entire difference.

Mr. BORSTING. Again, we are going by the internal procedures of the Department.

Senator LEVIN. We are going on available information.

Mr. BORSTING. As I mentioned earlier, if you had a system where every working document—in your own office, if every internal working paper was made available to outside sources, would you want this to happen in your office?

Senator LEVIN. I think you are now changing the subject.

First you say relevant documents, even though presumably they are internal working documents, will be made available; is that right? What you consider to be relevant documents, even though they are internal working documents will be made available, is that your statement?

Mr. BORSTING. Well, what I am saying is, the Secretary is now, rephrasing in a little different way, the Secretary is now considering your request which came last night and I do not know the final outcome of what will be made available to you.

So it is very difficult for me to comment in specifics at this stage, as you can understand, because the request just came in last night. But in talking with the Secretary this morning, he would like to make some information available to you. I think it is best to see what that information is.

Senator LEVIN. But the statements made earlier by you today that all relevant data will be made available—does that include internal working documents?

Mr. BORSTING. I cannot say. I don't know the details, Senator.

Senator LEVIN. You can't even tell us all relevant data will be made available to the GAO today?

Mr. BORSTING. I cannot say at the moment what will be made available to you because I don't know.

Senator LEVIN. All right, fair enough. I think that is a more accurate statement of where we are. You don't know that all relevant data, even in your opinion, will be made available.

Mr. BORSTING. I think it best to look at the data. Maybe the word "relevant" was a poor choice of words because I don't know exactly what will be made available to you.

Senator LEVIN. I know the chairman has made some strong statements about his opinion as to what we are legally entitled to. What we are, I believe, constitutionally required to look at if we are to carry out our oath, is to look at the cost of these systems before we vote on them. I believe we have a clear legal right to this material. It is very relevant. I also agree with the chairman that this is a much broader issue than the B–1 bomber. The B–1 is just one example. There are many. We are really talking about the principles involved in the data this Congress needs or any other Congress. How do we make decisions; how do we keep cost overruns down? That is the general subject matter we are looking at. The B–1 is one example, one symptom of a problem. Here we have this available data, am I right, Mr. Borsting, the Air Force and DOD thought was useful. Is it fair to suggest the CAIG and ICA documents were considered by the DOD before they reached their conclusion——

Mr. BORSTING. Certainly things were changed based on——

Senator LEVIN. It is relevant, useful information to the Air Force and DOD but we are not entitled to it, that is what you are saying.

Mr. BORSTING. It is an internal working document. Certainly our estimates now on each part of the system is certainly available to you.

Senator LEVIN. What you call internal working documents are not privileged and you cannot stamp something internal working document and keep that from the eyes of Congress Taxpayer funds paid for that. The only privilege lies in something the President personally claims ot be privileged, and that is clear under the Constitution. No one is trying to tamper with that. If you think every document in every agency can simply be kept from the Congress by someone stamping it an internal working document, even though it is relevant to a critical question of cost, I hink you are wrong, as a matter of law. Do you have

a legal opinion that says you can keep documents from the Congress for that reason?

Mr. BORSTING. I am not a lawyer and I prefer not to comment on that.

Senator LEVIN. Again, I think we have to wait for the answer. I just hope you will use your best efforts here to do what is legally required and morally required, which is to get us all the information you folks have.

You have the benefit of CAIG and ICA. Why shouldn't we?

Mr. BORSTING. As I mentioned earlier, much of it is completely changed. We are not doing a lot of the things people initially talked about. It is a different airplane.

Senator LEVIN. Of course.

Should we have the benefit of the thinking of CAIG and ICA as to what is in the airplane? You had the benefit of that thinking. Why shouldn't we?

Mr. BORSTING. Some of the thinking—again, let me repeat, the Secretary is considering your request and I am told some information will be given to you.

I cannot tell you exactly what it is at this time. I don't know. I will repeat that.

Senator LEVIN. Thank you, Mr. Chairman.

Chairman ROTH. Mr. Borsting, as I indicated, I will send a letter to the Secretary urging that the Department of Defense supply the information requested by the GAO. I want to reiterate that I think it is important that that agency, as our watchdog, secure the information they deem necessary to evaluate the project. That is the whole purpose of an independent agency. I have already indicated by sensitivities to the security and the right that you have free discussion. I do want to warn that I don't think that latter means that any document can be considered internal matter and not available to the appropriate committee of Congress. But I think more important than the legal niceties of the situation is the fact that it is important to build the kind of confidence and trust I think is essential to maintain the kind of defense that is going to be critically important to this country in future years, that there become a working relationship between the Congress and the Department of Defense, particularly the GAO, who we basically rely upon as our eyes and ears, that they are getting the necessary information.

If the situation is permitted to develop into a confrontation with demands and sharp criticism flowing in both directions, I really don't think it helps the basic purpose of what we are trying to achieve, which is an adequate defense.

So I would urge you and those in the decisionmaking to try to come to a reasonable solution to this problem.

Mr. BORSTING. I generally agree with you, Mr. Chairman. I know the Department in the past and now certainly supplies the Congress with voluminous information, as a matter of fact.

Chairman ROTH. That may be part of the problem.

Mr. BORSTING. Sometimes that is part of the problem. In fact, we supply so much information, I might ask your committee some time to take a look at the volume of information that I am sure is not used. I go back to my comment also that Alice Rivlin made about the SAR's.

having a once-a-year SAR instead of four SAR's a year. We get asked for information and very seldom is the request ever said no, let's not do that now, we just pile on information.

Chairman ROTH. One of my concerns is that a bad case makes bad law or bad requests. So much of what we do has resulted from that. I don't want that to happen in the case of the B–1 or any other. I think we have to develop a system where the independent agency, GAO, gets whatever information they feel is essential. Frankly, I am concerned that Congress too often requests things that are never utilized.

It comes over here and is stacked away but nobody really pays much attention to it. I am concerned about that aspect of the problem as well. But I am hopeful that with good will on the part of both that we will make sure the Congress does have the information that it must have to discharge its responsibilities. I thank you——

Mr. BORSTING. Could I make just two final comments? I would like to add a couple of comments to the record, if I might.

Chairman ROTH. Sure.

Mr. BORSTING. One, you asked Dr. Rivlin for any comments on your bill. I do have some comments on the bill that I would like to put in the record, if I might.

Chairman. ROTH. I would welcome those.

Mr. BORSTING. I also have some comments on the GAO report that we were talking about, I think those statistics, and I would very much urge that GAO talk with our staff about the report because the report itself, I believe, made some different changes in the reporting this year from previous years and it makes a comparison of previous years very difficult and, also, we did not get a chance to discuss the draft GAO report which we usually do and we will be happy to discuss and work with the GAO on that report.

So these two things, one to supply for the record and, two, maybe also to supply for the record some comments that I have on the GAO report.

Chairman ROTH. Very good. Thank you, Mr. Borsting, and gentlemen, for being here today.

Mr. BORSTING. Thank you very much, Mr. Chairman.

[Mr. Borsting's prepared statement and comments on S. 2397 and the GAO report referred to follow:]

PREPARED STATEMENT OF JACK R. BORSTING, ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

I am very happy to appear before the committee this morning to testify on the development and reporting of cost estimates for major weapon acquisitions, and to inform you of our initiatives to reduce the costs of weapon systems.

REPORTS TO CONGRESS FOR MAJOR WEAPON ACQUISITIONS

Effective management requires periodic reporting on program status so we can compare actual performance with our estimates and make adjustments as necessary. One measure of our long term performance in planning and controlling our major acquisition programs is provided by the cost histories reflected in Selected Acquisition Reports which we provide to the Congress. As you know, we now have an additional requirement to provide the Congress with Unit Cost Exception Reports which are closely related to the Selected Acquisition Reports. In addition to these reports, we provide a significant amount of cost information in other reports such as the Research, Development, Test and Evaluation Summaries and Congressional Data Sheets in connection with the justification of the Defense Budget. Let me describe these reports before discussing cost estimating.

SELECTED ACQUISITION REPORTS (SARs)

The Selected Acquisition Report, or SAR, instituted by DoD in 1967 is a standard, comprehensive, summary status report on major defense acquisition programs. The SAR: (a) reflects the current best estimate of key performance, schedule, and cost goals, (b) compares these estimates with baseline parameters established by the Defense Systems Acquisition Review Council (DSARC) at Milestone II, the time at which the program

was approved for full-scale development; and (c) exlpains all variances from the baseline.

The SAR is not a decision document. It may be compared to a snap shot taken at the end of each quarter reflecting the overall status of the weapon system program. It reports on the progress and the problems in meeting performance, schedule, and cost targets of the program. The SAR focuses primarily on exceptions to the approved baseline plan and to breaches of program thresholds that were approved at DSARC II--Full-Scale Development. It provides a means of comparing actual with planned accomplishments.

In February 1969, Senator Stennis, chairman of the Armed Services Committee, or SASC, asked the Secretary of Defense to provide him with a periodic status report on major weapons systems. The Secretary decided in April 1969 to use the SAR as the vehicle to satisfy the SASC requirements. Over 112 weapon systems, valued in excess of $500 billion, have been reported in SARs. At any given time about 50 weapons systems are reported. In 1975, Public Law 94-106, the fiscal year 1976 and fiscal year 197T appropriations bill, established the SAR as the legal reporting document to the Congress. This law was amended by Public Law 96-107 at the request of the Department of Defense. The purpose of this revision was to tie the December SAR to the submission of the President's Budget. The SAR consists of eight separate sections, and features the salient operational/ technical, schedule, and cost status. It also includes the explanation for all cost variances from the program baselines.

The program acquisition cost section summarizes all changes to both costs and quantities which have occurred in the program since the establishment of the baseline. The program costs are shown for development, procurement, and construction in the program base-year dollars as well as in current dollars (these terms are defined in the section "Cost Growth in Weapons Systems"). Also shown is the amount of economic escalation included in the program at the time the baseline was established. In addition, all cost changes to the baseline are reflected in constant dollars. The Current Estimate reflects total acquisition cost of the latest approved program which includes a provision for experienced and projected escalation. All cost variances are summarized by category. These categories are:

(1) Economic escalation--impact of economy on base program;

(2) Quantity change--change in quantity to be procured;

(3) Engineering change--alteration of the physical or functional characteristics;

(4) Support change--change in spare parts, training, ancillary equipment;

(5) Schedule change--change in procurement or delivery schedule or intermediate milestone;

(6) Estimating change--correction or refinement of original estimate;

(7) Other change - changes not included in the other categories.

All changes are reflected in both program base year constant dollars as well as in current dollars.

UNIT COST EXCEPTION REPORTS

The Congress, in an effort to focus more management attention to the area of cost growth, instituted the "Unit Cost Exception Report" (PL-97-86, section 917 of DoD Authorization Act, 1982). This act requires the Department of Defense to submit unit cost reports whenever certain thresholds are breached. All 47 March 31, 1981, Selected Acquisition Report systems are covered by this Act. The report is required when a Service Secretary has reasonable cause to believe that there is an increase of 15% or more in the Program Acquisition Unit Cost (PAUC) or the Current Procurement Unit Cost (PUC) in one or more of the 47 SAR systems. The Service Secretary must promptly notify Congress and follow up within 30 days with a report that: (a) states the reasons for such increase in the total Program Acquisiton Unit Cost or Procurement Unit Cost, (b) identifies the military and civilian officers responsible for program management and cost control of the major defense system, (c) states the action taken and proposed to be taken to control future cost growth of such system, (d) reports any changes made in the performance or schedule milestones of such system and the degree to which such changes have contributed to the increase in total Program Acquisition Unit Cost or Procurement Unit Cost, (e) identifies the principal contractors for the major defense system, and (f) provides an index of all testimony and documents provided to the Congress on the estimated cost of each system.

If the increase is more than 25%, the Secretary of Defense must "certify" within 60 days: a) such system is essential to the national

security, (b) there are no alternatives to such a system which will provide equal or greater military capability at less cost, (c) the new estimates of the Total Program Acquisition Unit Cost or Procurement Unit Cost are reasonable, and (d) the management structure for such major defense system is adequate to manage and control total Program Acquisition Unit Cost and Procurement Unit Cost.

The law requires program managers to submit quarterly reports to the Service Secretaries on all SAR programs. These reports include current estimates of the Program Acquisition Unit Cost, the procurement Unit Cost, and changes in schedule and performance specifications.

The first set of reports were sent to Congress on March 9, 1981 by the Service Secretaries and on April 8, 1982 by the Secretary of Defense.

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (RDT&E) DESCRIPTIVE SUMMARIES

The RDT&E Descriptive Summary contains data for each R&D program included in the budget request to Congress. This exhibit provides both financial tables and narrative description of the planned effort for the entire life of the program. The exhibit includes the following information: (a) The mission need being satisfied by the effort funded in a specific line item, (b) The prior year program accomplishments, (c) The budget year planned effort, (d) The program plan for future years, (e) Program milestones covering the development and production phases, (f) Program characteristics and objectives, (g) Major contractors and government activities involved in the program, (h) Funding tables indicating all past year funding, budget year, and budget year plus one detailed cost

estimates, and a summary of the outyear funding estimate. For the FY83 budget, the Department submitted 500 RDT&E Descriptive Summaries.

CONGRESSIONAL DATA SHEETS

A Congressional Data Sheet is a comprehensive data sheet submitted to the Congress annually with the budget for weapon system acquisitions funded from the procurement appropriations. For the FY 1983 budget submission, Congressional Data Sheets were prepared for 142 programs. Between the SAR, the RDT&E Descriptive Summaries, and the Congressional Data/Sheets, the Congress is provided cost information on all major DOD acquisitions. The Congressional Data Sheet contains the following information: (a) Narrative description, mission statement, current program acquisition cost estimates and the basis for the current budget request, (b) Contract data indicating type of contract, names of contractors and contract award dates for prime contracts and major subcontractors, (c) Explanation of acquisition cost changes by appropriation since the preceding budget submission, (d) Test and Evaluation data.

By including an explanation of cost changes by appropriation from one year to the next, the Congress is able to see the program cost changes since the program was last reviewed. At the same time, the change in program costs from inception is available to the Congress by comparing these documents over several years. The Congressional Data Sheets represent an important element of the information provided to the Congress on major DoD acquisitions.

DEVELOPING COST ESTIMATES FOR MAJOR WEAPON SYSTEM ACQUISITIONS

Cost estimates for major weapon system acquisitions are developed in support of two management processes in the Department of Defense: (a) the Defense System Acquisition Review Council (DSARC) process, and (b) the Planning, Programming, and Budgeting System (PPBS).

Under the DSARC process a major system new start program is endorsed by the Secretary of Defense in the context of the Service budget. At Milestone I, the Secretary of Defense decides whether to commit resources for Advanced Development. The cost estimate developed at Milestone I is called the Planning Estimate. At this point, the DoD has not yet closed any of its options for acquiring a specific system, so Planning Estimates reflect characteristics and costs of a generic system. Since this milestone marks the completion of an exploratory phase, program specifications, cost and quantities are preliminary and will be more fully developed before selecting one or more alternatives for the demonstration and validation phase. This is in consonance with OMB circular A-109, which states that care should be exercised during the initial steps of the acquisition process not to conform mission needs or program objectives to any known systems or products that might foreclose consideration of alternatives. Since the planning estimate is not associated with a well defined weapon system its use is only relevant to aid in the decision process of selecting a concept from a number of alternatives. It should not be used as a baseline estimate from which cost performance is measured.

Parametric estimating techniques are frequently employed at this initial phase; these parametric estimates are based upon data

obtained during the development, production, and fielding of similar predecessor systems. Parametric cost models relate cost to system performance or physical characteristics, for example, weight, speed, range, et cetera. They are useful at this stage because only general characteristics of the system are known. A detailed cost estimate based on engineering techniques can not be developed due to lack of specific design criteria.

At DSARC II, the Secretary of Defense decides on whether to commit resources to the full-scale development (i.e., detailed design) of a major system. The estimates of operational/technical characteristics, schedule and program acquisition cost, developed at the time the Secretary approves Full-Scale Development, is called the Development Estimate. This becomes the baseline from which the program is measured.

The DSARC II milestone decision focuses on specific system alternatives being recommended for full-scale development. Specific system characteristics and the required quantities needed to meet the projected threat are decided at this time. However, considerable uncertainty may remain at this point--for example, uncertainties in the projected threat and technical and business uncertainties to be addressed by the Full-Scale Development program. At this point, a cost estimate for full-scale engineering development usually based on an industrial engineering or "grass roots" estimating approach is available from contractor proposals. The pure industrial engineering approach relies on detailed simulation of all operations and an exhaustive list of all the materials required to develop and produce a unique and specifically defined piece of equipment. This procedure also makes use of standards built up from time and motion

studies, vendor quotes, manloading requirements by work center and station, learning curves, etc. Parametric cost estimates or cost estimates based on analogous systems are used by DoD cost estimators to provide a check for realism.

At the DSARC III milestone decision in the acquisition process, focus is on the decision to proceed to production of the weapon system. At this time detailed engineering cost estimates are available from contractor proposals. Estimates can now be made on the basis of actual cost experienced during the Advanced Development, Full-Scale Development, and Low Rate Initial Production. This information is coupled with historical data on similar systems for projections of cost improvements realized during production.

COST ANALYSIS IMPROVEMENT GROUP (CAIG)

OSD requires that the Military Departments submit not only the program office's estimate at each of these milestone decision points, but also a second estimate prepared by an organization independent of the program office. Fifteen working days prior to the convening of each DSARC, the Military Department presents these estimates to the Cost Analysis Improvement Group, or the CAIG.

The CAIG, established by OSD in 1972, advises the chairman of the DSARC on all matters related to cost. It is made up of representatives from the Under Secretary of Defense, Research and Engineering, the Assistant Secretaries of Defense -- Comptroller; Manpower, Reserve Affairs, and Logistics; and the Director, Program Analysis and Evaluation.

Also represented are the Military Departments and the Joint Chiefs of Staff (JCS). On the basis of the Military Department's presentation and its subsequent analysis, the CAIG prepares a memorandum for the DSARC with its evaluation of the estimates presented and, when prepared, the CAIG independent estimate.

At the meeting of the DSARC principals, the program manager's estimate and the results of the CAIG review are presented and significant variances among these estimates explained. Members of the DSARC are then able to make an informed judgment on which cost estimate, or range of estimates, for a given system is the most valid figure on which to base their decision.

Inherent in this process is the development of a range of cost estimates which reflects the potential for program cost growth. This tests the willingness of the DSARC to proceed with the acquisition of the system despite the risk of this potential growth, as opposed to other alternatives. In addition, the presentation of independent estimates at DSARC reviews and the requirement to explain significant variances among these estimates exert pressure for more realistic official program cost estimates from the program managers.

In addition to support of the DSARC process, the CAIG provides cost reviews of selected weapon systems, supports the review of the Unit Cost Exception Reports and responds to requests from the Secretary or other principals of the Department. The CAIG serves as the Secretary of Defense's independent cost estimating organization. Its assessments are made independently from each of the Military Departments.

PLANNING, PROGRAMMING, AND BUDGETING SYSTEM

The management process by which DoD develops a five-year plan and which culminates in the presentation of the President's Defense budget to the Congress each year, the Planning, Programming, and Budgeting System (PPBS), is closely associated to the DSARC process and the development of weapon system cost estimates. After receiving fiscal guidance as a result of the planning process, the Services develop Program Objective Memorandums (POMs) during the programming phase. This process involves definition and analysis of alternative forces, weapon systems, and support systems together with their resource implications. It is during POM preparation that the Services update their weapon system cost estimates on the basis of new information received during the past year. Depending upon the stage of development, i.e., whether the weapon system is being justified as a new start or is at Milestone I, II, or III in the acquisition process, the level of detail of the cost estimates will vary from a low level of detail parametric estimate or an estimate based on an analogous system, to a very detailed industrial engineering estimate based on contractor proposals. One of Mr. Carlucci's thirty-two Acquisiton Improvement Program initiatives concern improving the linkage between the DSARC and PPBS processes. Another Carlucci initiative which directs budgeting to most likely costs, will make greater use of service independent cost estimates to support the updating of weapon system cost estimates during the PPBS process.

During budget development, the services translate programs from mission description to appropriation categories as required by the Congress. The Services again, at this time, review and validate weapon system cost estimates which are approved in Program Budget Decisions, PBD's. As the Budget is developed, budget back-up and justification materials, such as the Congressional Data Sheets and the RTD&E Descriptive Summaries, are also prepared for Congressional review.

COST GROWTH IN WEAPON SYSTEMS

It is important at this point to provide some basic cost definitions. The terms "base years" or "constant dollar" and "then-year" or "current dollars" are used extensively and are often confused. The distinction between these terms is not significant in most day-to-day off-the-shelf purchases. But the difference is critical in programs which require many years to develop and produce - especially during periods of high inflation. In this regard I would like to note that some of the procurements, which we reported in the Selected Acquisition Reports last month, extend into the 1990's.

"Current" dollars are dollars spent in the year in which the cost is incurred, that is, when the work is done. DOD appropriations are stated in current year dollars, the amount reflecting the actual dollars paid out. When future costs are stated in current dollars, the amount given reflects the expectation of actual dollars which will be paid out, including any amount projected to account for future price changes.

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On the other hand, "base year" dollars are fixed in value for the year in which the estimate is made, for example, fiscal year 1975 constant dollars. An estimate is said to be in base year dollars if costs for all work contemplated in each year of a multiyear program ignore future inflation and and reflect the average level of prices prevailing in the base year.

These terms are important to keep in mind to separate and describe the sources of cost growth. For example, cost comparisons made in base year dollars reflect changes in a program that would be present without the effects of inflation. Cost comparisons made in current dollars include the effects of inflation. In periods of high inflation, the difference can be significant.

Table 1 shows the cost history of the F-15 as an example. In 1970, at the time the development or baseline estimate was developed, we estimated that this program of 749 aircraft would cost $6.08 in terms of fiscal year 1970 base year dollars. A prediction for the effects of inflation throughout the planned life of the program amounted to $1.4 billion. This gave an estimate of $7.4 billion in current year dollars. Since the baseline was established, the projected total buy has been increased by 666 aircraft. The base year impact of this quantity change in fiscal year 1970 constant dollars is a $3.7 billion increase to the program, or an increase of $16.8 billion if inflation is included. Other changes, such as engineering, schedule, estimating, et cetera, have resulted in an increase of $3.8 billion in base year 1970 dollars, or $12.8 billion in current dollars. In addition to these changes, unexpected changes in the price level index since the baseline was established have resulted in economic escalation of $3.6 billion.

TABLE 1 COST HISTORY OF F-15
(Dollars in Billions)

DOLLAR MEASURE	DEVELOPMENT ESTIMATE	DEVELOPMENT ESTIMATE ADJUSTED FOR QUANTITY CHANGES	PROGRAM CHANGES	UNANTICIPATED ECONOMIC BASELINE	CURRENT ESTIMATE	PERCENT CHANGE ADJUSTED FOR QUANTITY
Base Year (1970)	$6.0	$ 9.7	$ 3.8	-	$13.5	39%
Current Year	$7.4	$24.2	$12.8	$3.6	$40.6	68%

Ignoring the effects of inflation by measuring the constant fiscal year 1970 dollars, the cost growth in this program from 1970 to 1981, after adjusting for the increased number of aircraft, is $3.8 billion, or 39 percent. Measured in current dollars, the presence of uncertainties in estimating inflation produce a different result. After adjusting for the increased number of aircraft, the cost growth in current year dollars from 1970 to 1981 was $16.4 billion, or 68 percent.

This single example of the F-15 illustrates the dramatic difference between base year and current dollar estimates in a period of high underlying inflation. To give a complete view of DOD cost estimation and control, both base year and current cost measures should be used. In time sequence, DOD Development Estimates are generated in base year dollars and are subsequently adjusted to project for inflation. The emphasis on realistic base year cost estimates is evident in the DOD process for developing and approving estimates for weapons programs.

Table 2, is a summary of the SARs as of December 31, 1981. It encompasses some 44 major programs that we included in the SARs submitted last month in support of the President's budget. All of this information is summarized in the SAR summary tables which we provide to the Congress along with the SAR for each program.

Specifically, table 2 summarizes the bottom line for 44 major programs in the quarter ending December 31, 1981. The table presents, in base year and in current dollars, the sum of original Development Estimates,

Table 2

SAR PROGRAM COST SUMMARY
44 MAJOR PROGRAMS, DECEMBER 31, 1981
(DOLLAR AMOUNTS IN BILLIONS)

DOLLAR MEASURE	DEVELOPMENT ESTIMATE	DEVELOPMENT ESTIMATE ADJUSTED FOR QUANTITY CHANGES	PROGRAM CHANGES	UNANTICIPATED ECONOMIC BASELINE	CURRENT ESTIMATE	PERCENT CHANGE ADJUSTED FOR QUANTITY
BASE YEAR	$128.0	$161.1	$38.3	--	$199.4	24
CURRENT	$178.5	$288.6	$115.7	$50.5	$454.8	58

these same estimates adjusted for changes in quantity, total cost due to program changes and changes in economic escalation, the Current Estimate and the percent change since the Development Estimate was made. Removing the effects of inflation and measuring in base year dollars which have been adjusted for quantity, total real cost growth for the 44 systems from the time of the Development Estimate to 1981 is 24 percent.

AVERAGE ANNUAL RATE OF COST GROWTH

Our examination of historical Selected Acquisition Reports indicates that DoD showed, after adjustment for quantity changes and escalation, substantial improvements in controlling cost growth during the early seventies. In base year dollars, the annual rate of growth dropped from 6.4 percent in December 1972 to 4.4 percent in March 1975. We have maintained an overall annual cost growth rate between 3.0 percent and 4.2 percent since 1975. In the December 1981 SARs, a comparison of the program cost growth among the Services shows an Army annual cost growth rate of 5.4 percent, the Navy at 3.0 percent and the Air Force at 4.6 percent. This cost growth is measured in base year dollars relative to the Development Estimate made at the time a system passes the DSARC II Milestone and enters Full-Scale Development. The calculated growth rates are a useful guide to determine the general success of cost control in DoD. However, the composite annual growth rate calculated each year is made up of the growth rates of many programs, each at different stages of development. Therefore, year-to-year variations in the annual composite growth rate may reflect the changing mix of programs as well as year-to-year variations in average growth rate.

Table 3 shows a track of cost growth percentages in the SARs since 1975. In reviewing total cost growth experienced, unanticipated inflation was the single major factor contributing to cost growth in major weapon system acquisitions. During the 1975-1981 time period, unanticipated inflation varied between 57 percent and 85.5 percent of the total cost growth. Changes in quantity also contributed significantly to cost growth as shown.

CONTROLLING COST GROWTH

Cost growth in major acquisition programs has been the target of considerable Congressional and Department of Defense attention for many years. There have been numerous suggestions from both the private sector and various government agencies as how best to eliminate the increases experienced in the real cost of DOD weapon systems over their baseline cost estimates.

The Reagan administration upon taking office conducted a 30-day assessment of the Defense Acquisition System under the direction of the Deputy Secretary of Defense, Mr. Frank Carlucci. As part of the assessment, many of the most promising ideas for controlling cost were pulled together into a comprehensive package. These ideas were formulated into recommendations and included in the 32 Acquisition Improvement Initiatives which have become known as the Carlucci Initiatives.

TABLE 3

% Cost Growth by Category as of December SARs

	75	76	77	78	79	80	81
ESCALATION 1/	65.6	57.0	78.6	67.6	85.5	72.2	77.7
QUANTITY	13.2	29.0	11.7	19.0	2.5	8.0	14.2
ALL OTHER 2/	21.2	14.0	9.7	13.4	12.0	19.8	8.1
	100	100	100	100	100	100	100

1/ Includes changes in inflation rates and inflation associated with other program changes.

2/ Includes Engineering, Support, Schedule, Estimating and other change categories.

The Department of Defense Acquisition Improvement Task Force has completed an assessment of progress toward implementation of all the acquisition improvement initiatives which is contained in their report dated December 23, 1981. The report provides a detailed description of accomplishments, barriers to implementation, and specific recommendations to overcome the barriers and to achieve implementation of the initiatives. Subsequent to publishing the report, a permanent Acquisition Improvement Steering Group was established to oversee implementation of the initiatives. The Steering Group appointed a special subgroup consisting of members of each Service and OSD who will be responsible for facilitating and monitoring the Services' implementation of the initiatives related to cost growth.

A description of the initiatives related to cost growth can be divided into two categories. The first category consists of those initiatives which will lead to more realistic baseline cost estimates in the future and includes the following: (a) Budget to Most Likely Cost, (b) Budget Funds for Technological Risk, (c) Budget for Inflation, (d) Forecast Business Base Conditions at Major Defense Plants.

The second category consists of those initiatives which will contribute specifically to improving our ability to control costs within the baseline estimates and include the following: (a) Assure Appropriate Contract type, (b) Implement Design to Cost Contract Incentives, (c) Initiate Pre-Planned Product Improvement, (d) Increase Program Stability.

Implementation of the initiatives to control cost is well underway as the following few examples will illustrate:

- As stated previously, the biggest factor contributing to cost growth on acquisition programs has been unanticipated inflation. For the past several years the Defense Budget has been based on inflation rates designed to measure all price increases taking place in the U.S. economy - namely, the implicit Gross National Product (GNP) deflator. There are several distinct problems in using the GNP deflator to project future inflation in the DOD budget. First, Defense price experience over the past ten years has been calculated by the U.S. Department of Commerce to be higher than price increases recorded in the general economy. Second, Defense systems are affected by general factors as well as those unique to Defense. Finally, the long lead times for major weapons systems cause the estimates of future inflation rates to be more critical to DOD than to other agencies. Pricing of the FY 1983 defense budget and its five year program is now based more directly on economic events affecting those industries actually providing military goods and services. The inflation assumptions for major procurement commodities (ships, aircraft, missiles, and tracked vehicles) in the FY 1983 budget average about two percentage points higher than the GNP average.

- In pursuing the objective of budgeting more realistically for our weapon systems, the Services have been directed to make more use of their independent estimating organizations not only for the DSARC process but for the budget process as well. Also, techniques have been developed and are being used to budget for technological risk.

- The Design to Cost (DTC) concept has been revitalized by proposed new techniques for rewarding contractors who demonstrate that they have achieved DTC requirements and for penalizing those who do not.

- Methods of encouraging DOD contractors to submit realistic cost proposals are being investigated. One suggested method being examined currently is including cost realism of a contractor's proposal as a mandatory rating factor in source selection.

Many of the Acquisition Improvement Initiatives have led to savings that will be realized in executing our Five Year Defense Plan. For example, we estimate the savings from multi-year contracting initiatives for FY 83-87 to be approximately $1.1B. These savings are the result of bringing stability to industrial planning and permitting efficient purchase of materials; reducing administrative costs and overhead; providing greater incentives for plant investment: and enhancing continuity of subcontractor supply lines, thereby reducing bottlenecks.

We have placed particular emphasis on consideration of plant capacities and buying our weapon systems at economical production rates. When weapon system production rates are low, the unit cost of production increases. As a result of this policy, planned production rates for a number of systems were increased in both the FY 82 and FY 83 Defense budgets. The anticipated saving from this action is approximately $2.4B over the FYDP years.

Mr. Chairman, this concludes my prepared remarks. Thank you for the opportunity to testify today.

COMMENTS ON S. 2397

The following are comments for the record on the proposed bill.

The bill as prepared requires both a quarterly report and an exception report very similar to the DoD SAR and Unit Cost Exception reports. The Congress would be better served with a yearly report similar to the SAR, but less complex, and with elimination of the quarterly reports. The exception reports during the year should satisfy and take the place of quarterly reports.

The idea of excluding the impact of unanticipated inflation from calculations relating to threshold breaches is desirable. This technique results in essentially a constant dollar analysis which is a better indicator of how well or how poorly management is doing.

The Secretaries of the Executive Department/Agencies and their responsible Project Managers—not OMB—should be held responsible and accountable for cost growth.

The Oversight Committees, not OMB, should specify what is wanted in a reporting system. It is most probable that the different oversight committees will require different information.

The report requires authorized, appropriated, and obligated funds to be reported. The Congress would be best served by limiting the report to appropriated funds.

The report should focus on "the baseline estimate"—which best represents the well defined system rather than the "initial estimate" which represents only a concept.

The report requires an index of testimony which has just been dropped as a requirement from our Unit Cost Exception Reports—dropping this requirement is recommended to avoid too much information that may not be needed.

The proposed bill requires that "no additional funds may be obligated or expended" if a 25% breach occurs. Although the bill adds the phrase "(except where the Government has an existing legal liability to pay)," this phrase is not sufficient to cover orderly termination of the project. Thus, it is recommended that the term "expended" be dropped and just the term "obligated" be kept which is the current legislative language under which the Unit Cost Exception Reports are operated.

There is no distinction between unit costs and program costs and between annual (current) procurement and total program acquisition costs.

The bill does not specify as to when a report is to be submitted after a threshold is breached.

COMMENTS ON GAO REPORT

The Congress receives its information on cost growth in Federal agencies from many sources. One of these is the GAO report on Financial Status of Major Federal Acquisitions referenced in the testimony. The 1981 edition of this report shows a change in the relative contribution to cost growth of civilian agencies and DOD. For the first time since the report's publication seven years ago, DOD exhibits significantly more cost growth in the report than in the previous years. Also, the report shows a dramatic reversal of cost growth for DOD compared to civilian agencies. There is a question as to the validity of this dramatic reversal in trends. DOD shows a sharp increase in cost growth from the previous year's report while the civilian agencies show a sudden decline.

This report is an example of the difficulty in managing large amounts of data so as to provide meaningful information for the Congress to perform its oversight function. The implication of this reversal in the 1981 DOD cost growth position is that a serious management problem suddenly exists within the DOD with regards to cost growth.

This inference is not valid because the 1981 GAO report does not provide a complete and correct assessment of cost growth.

First, in order to reduce the volume of cost data handled, GAO established a new $50 million review threshold for civilian agencies and for DOD construction and computer acquisitions. This change in threshold altered the basis of year-to-year comparison. Many systems in DOD experiencing no cost growth or even decline in cost were eliminated while many civilian acquisitions experiencing more than 100 percent cost growth were deleted. Also, this threshold was inconsistently applied. Some civilian programs over the $50 million threshold

were not included in the 1981 report. In the 1980 report, many of these programs were identified as having 100 percent or more cost growth. For DOD programs, this threshold was also applied inconsistently. However, this resulted in the exclusion of a number of DOD programs that had experienced no or negative cost growth.

Another problem is that the cost growth comparisons made by GAO are misleading. Cost estimates must be adjusted for quantity changes and inflation in order to accurately reflect cost growth. The GAO report does not do this. There are significant changes in DOD quantities purchased from 1980 to 1981. In 1980, 26 percent of the increase in the cost estimates of SAR reported weapons systems was attributable to quantity changes. In 1981, 40 percent of the increase in the cost estimates of SAR reported weapon systems was attributable to quantity changes. Increases in the desired quantities of weapons systems were due to decisions to enhance the defense posture of the nation—not improper management. The report also does not separately identify cost increases due to inflation because it fails to use constant dollar calculations.

Another area that reduces the usefulness of the GAO report in assessing cost growth are general inconsistencies in handling the agency data. There are some instances of misinterpretation of data reported. For example, in the 1981 report an estimate of RDT&E and procurement costs was compared to an estimate consisting of only RDT&E costs for an Army program. This resulted in a billion dollar error increasing reported DOD cost growth.

Additionally, the GAO provides a summary of cost growth that compares current estimates with planning estimates for DOD acquisitions instead of baseline estimates, the latter being the more accurate DOD point-of-reference for cost control. This compounds the confusion concerning DOD cost growth created by the GAO report.

The 1981 GAO report does not provide a fair assessment of DOD cost growth. Unfortunately, the GAO did not solicit DOD comments on their draft report before issuing the final report. DOD will provide comments and corrections on the final report to the GAO.

Chairman ROTH. We have a panel of Mr. Doremus, who is Chief, Program Review Division, Office of the Budget, Department of the Interior; and Mr. David Nathan, Deputy Assistant Secretary for Acquisition, Department of Commerce.

Gentlemen, the hour is late. I think what I would like to do, with your concurrence, is to include your statements in the record and will leave the file open and will submit a number of written questions to you for your answers.

Thank you.

[The statements of Mr. Doremus and Mr. Nathan follow:]

Statement of Stanley D. Doremus, Office
of Budget, Department of the Interior
before the Senate Committee on Governmental Affairs
April 22, 1982

Mr. Chairman and Members of the Committee:

It is a pleasure to appear before you today to discuss the subject of cost control of major acquisitions.

Major acquisitions are defined in S.2396, in part, as those costing over $50,000,000 in Federal funds. Such acquisitions in the Department of the Interior consist almost entirely of water resources construction projects of the Bureau of Reclamation and acquisitions of private lands for authorized units of the National Park System.

Both Reclamation construction projects and new units of the National Park System are authorized by legislation and such authorizations include specific appropriations ceilings. This means that increases in appropriations above the authorized ceiling can only be accommodated by legislation that increases the authorized ceiling. One exception to this general condition is that, in the case of National Park units, authority is provided in P.L. 95-42 that permits the National Park Service to exceed the authorized ceiling by $1,000,000 or 10% of the authorization in any given year.

The Department of the Interior in its annual budget process reviews project cost estimates and compares current estimates to authorizations. Where necessary,

legislation providing for increased authorizations is proposed at the time that the President's budget is transmitted to the Congress. In this way, both the legislative and appropriations committees are kept currently informed as to changes in cost estimates for major projects. We do not believe, therefore, that a additional reporting system such as is spelled out in S.2396 would be helpful to either the Congress or ourselves in controlling project costs.

Specifically, in the case of the Bureau of Reclamation, construction cost estimates are developed during all stages of a project from its inception through final completion. The feasibility cost estimates are used in feasibility reports which are the documents used by the Congress for authorization of projects for construction. These estimates are based on preliminary layouts and designs from which approximate quantities for each kind, type, or class of material, equipment, or labor may be obtained. The feasibility cost estimates are included in the authorization act and becomes the appropriation ceiling. Since these estimates are based on current prices, Congress includes a provision to allow the Bureau to adjust the authorized ceiling of the projects each year due to ordinary fluctuation in construction costs as indicated by engineering costs indexes applicable to the type of construction.

Following the appropriation of construction funds and during the actual construction of the project, the Bureau annually refines and updates the cost estimates. The revised estimates and the reason for any changes are presented to Congress along with the indexed appropriation ceiling in connection with the appropriation request. A procedure has been developed in cooperation with OMB, the General Accounting Office and the Committees of Congress for flagging those projects where the new cost estimate exceeds the indexed appropriation ceiling.

In cases where it appears the project costs have increased to the extent that the project can no longer be built within the appropriation ceiling additional construction is halted until a new ceiling is authorized by the Congress.

The Bureau also reports annually to GAO the financial status of major acquisitions where a comparison to the original baseline estimate is made and reasons for cost increase are identified.

With respect to the National Park Service, after the current fiscal year, the National Park Service is authorized to continue in only two major acquisitions as defined in the draft bill pending before the Committee: acquisitions of lands for the Appalachian National Scenic Trail and the Santa Monica Mountains National Recreation Area. However, our land acquisition budget requests for fiscal 1982 and 1983 have focused on the need for funds to pay for deficiencies in court awards, hardship and emergency cases, rather than for acquiring additional lands.

As the Committee may know, virtually all 300 plus units of the National Park System are authorized by separate and specific Acts of Congress. The National Park Service does not have general authority to establish and acquire a National Park. When the authorizing Committees consider legislation that would authorize acquisition of private land for a park, they request detailed boundary descriptions and acquisition estimates.

Based on detailed planning studies with public involvement, which consider the major resources to be protected and land necessary to properly manage the resources, the Park Service develops a boundary for the proposed area. In addition,

cost estimates for land acquisition are prepared. The boundary data, resource information, and land cost estimates are incorporated into a report on the legislation which must be cleared by the Department of the Interior and the Office of Management and Budget before it is sent to the authorizing Committees. The Committees then write into the legislation a ceiling on acreage to be acquired and a ceiling on the appropriation of funds with which to acquire the area. Thus, in the past 20 years the legislation which authorized most new parks has carried statutory ceilings on appropriations for land acquisition.

In general, the National Park Service develops estimates of land acquisition cost--as opposed to actual appraisals--prior to the enactment of authorizing legislation. Estimates are always prepared and reviewed by qualified appraisers. The exception is where there are 3 or fewer tracts of land involved, in which case we attempt to secure an appraisal. Appraisals are prepared by professional appraisers, usually under contract. As part of their qualifications they must be acceptable to the Department of Justice.

Cost estimates supplied as part of our reports to the authorizing Committees are prepared by staff appraisers (except where an actual appraisal is done in the case of 3 or fewer tracts) and involve the following: real estate research for comparable market data; development of trends; estimates of market value by type and class of land and size of parcels; study of tax assessments and ratios of assessments to recent sales prices; and study of other factors influencing land values. By this method a market value estimate is developed for each tract within the proposed boundary. To this estimate is added the indirect costs of acquisition based on certain assumptions, such as when the acquisition will be authorized and

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funds appropriated and how many tracts will have to proceed to condemnation, and administrative overhead. The aggregate of these estimates is the cost given to the authorizing Committees.

Cost estimates will be revised and updated any time supplemental information is obtained indicating that a previously submitted cost estimate is substantially invalid. The Service will make known to the Secretary and appropriate Committees any significant anticipated shortfalls following approval of the revised cost estimates.

Cost overruns in our major acquisitions arise from several causes. In the case of construction projects, inflation has been the major cause of cost increases although in any particular project costs might be increased by supply shortages, weather, or other unforeseeable conditions. Land acquisition costs are difficult to estimate accurately, but the major causes of cost increases in such cases are: the changes in cost from the time that the original estimate is completed and the point at which appropriations are available to begin purchases; and the process of condemnation, which usually results in costs higher than the appraisal.

This completes my prepared statement. I would be happy to answer any questions the Committee may have.

STATEMENT OF DAVID S. NATHAN

CONTROLLER

U.S. DEPARTMENT OF COMMERCE

BEFORE THE

SENATE GOVERNMENTAL AFFAIRS COMMITTEE

ON MAJOR ACQUISITIONS MANAGEMENT

APRIL 22, 1982

I AM PLEASED TO APPEAR BEFORE THE COMMITTEE THIS MORNING ON BEHALF OF THE DEPARTMENT OF COMMERCE TO DISCUSS DEPARTMENTAL POLICIES CONCERNING MAJOR ACQUISITIONS. AS THE CONTROLLER OF THE DEPARTMENT, I OVERSEE THE BUDGET PROCESSES AND MANY OF THE RELATED ACTIVITIES WHICH AFFECT MAJOR PROCUREMENTS. MY TESTIMONY WILL DESCRIBE THE BUDGET FORMULATION PROCESS THROUGH WHICH THE DEPARTMENT INFORMS AND RECEIVES CONGRESSIONAL APPROVAL FOR MAJOR ACQUISITIONS; THE PROCUREMENT PROCESS WITH WHICH MONITORING AND CONTROLLING OF THEM OCCURS; AND SELECTED MAJOR ACQUISITIONS WHICH I AM INFORMED THAT THE COMMITTEE HAS EXPRESSED AN INTEREST. FINALLY, I WILL COMMENT BRIEFLY ON S.2397, A BILL REQUIRING (1) CONGRESSIONAL AUTHORIZATION TO CONTINUE MAJOR CIVIL ACQUISITIONS WHOSE COST HAS INCREASED BY MORE THAN 25 PERCENT, AND (2) REPORTING ON THE STATUS OF SUCH ACQUISITIONS. SINCE THE BILL WAS NOT INTRODUCED UNTIL APRIL 19, 1982, THE DEPARTMENT HAS NOT HAD THE OPPORTUNITY TO FULLY REVIEW IT AND MAY WISH TO DISCUSS IT WITH THE COMMITTEE AGAIN AT A LATER DATE.

BUDGET FORMULATION PROCESS

THE DEPARTMENT PROPOSES MAJOR ACQUISITIONS AND SUBSEQUENT MODIFICATIONS TO THEM THROUGH THE CONGRESSIONAL APPROPRIATIONS PROCESS. UNLIKE THE DEPARTMENT OF DEFENSE, THE DEPARTMENT REQUESTS FUNDS FOR MAJOR ACQUISITIONS ANNUALLY IN THE PRESIDENT'S BUDGET REQUEST TO CONGRESS. SINCE MULTI-YEAR

OR TOTAL COST APPROPRIATIONS ARE NOT SOUGHT IN MOST CASES; REGULAR APPROPRIATIONS BILLS, SUPPLEMENTALS OR REPROGRAMMINGS UNDER LONG STANDING APPROPRIATIONS COMMITTEE PROCEDURES ARE ADEQUATE AND TIMELY IN OBTAINING CONGRESSIONAL APPROVAL, AND IN KEEPING CONGRESS INFORMED OF ANY CHANGES IN ACQUISITIONS IF THEY OCCUR.

THE DEPARTMENT CONSIDERS MAJOR ACQUISITIONS IN ITS INTERNAL BUDGET FORMULATION PROCESS. AGENCIES OF THE DEPARTMENT SUBMIT REQUESTS TO THE SECRETARY IN JUNE WITH THEIR ANNUAL BUDGET PROPOSALS. IN ADDITION TO THE NORMAL INFORMATION CONTAINED IN THE BUDGET, SIGNIFICANT FUNDING REQUESTS ARE SUPPORTED BY SUBMISSION OF A PROGRAM DEVELOPMENT PLAN (PDP). THE PDP ROUTINELY INCLUDES A MORE DETAILED JUSTIFICATION FOR THE PROGRAM, DESCRIBES STEPS TO IMPLEMENT THE PROGRAM, AND PROVIDES PRICING INFORMATION AND OUTYEAR COSTS. IF A PROPOSAL REQUIRES COMPUTER OR ADP EQUIPMENT, A FEASIBILITY STUDY MUST BE COMPLETED AND APPROVED BY OUR OFFICE OF ADP PROCUREMENT BEFORE IT CAN BE INCLUDED IN THE DEPARTMENT'S BUDGET. THE DEPARTMENT WILL BE STRENGTHENING THESE PROCESSES THROUGH ITS INTEGRATION OF THE BUDGET FORMULATION WITH THE MANAGEMENT BY OBJECTIVES PROGRAM. THE SECRETARY AND DEPUTY SECRETARY ARE COMMITTED TO SEEING THAT SCARCE RESOURCES ARE APPLIED TO THE DEPARTMENT'S HIGHEST PRIORITIES.

MODIFICATIONS TO MAJOR ACQUISITIONS ARE ALSO HANDLED THROUGH THE APPROPRIATION'S PROCESS. IF A PROJECT IS CHANGED IN SCOPE, THE CHANGE APPEARS IN THE FOLLOWING YEAR'S BUDGET AS AN INCREASE OR DECREASE. INFLATIONARY CHANGES ARE PROPOSED AS ADJUSTMENTS-TO-BASE IN THE DEPARTMENT'S SYSTEM OF BUDGETING. ANY CHANGE THAT MAY BE REQUIRED IN THE CURRENT FISCAL YEAR IS IDENTIFIED FOR CONGRESS BY A REPROGRAMMING NOTICE OR A SUPPLEMENTAL BUDGET REQUEST. OUR APPROPRIATIONS COMMITTEES REQUIRE NOTIFICATION OF REPROGRAMMING IF THERE IS AN INCREASE OR DECREASE IN A PROGRAM OF $250,000 OR 10 PERCENT, WHICHEVER IS LESS. CONSEQUENTLY, WE BELIEVE THAT CONGRESS IS KEPT WELL INFORMED WITH THIS LOW THRESHOLD FOR REPROGRAMMING. IF A MAJOR CHANGE OCCURRED WHICH REQUIRED FUNDS IN EXCESS OF WHAT COULD BE ACCOMMODATED IN THE CURRENT YEAR BUDGET, A SUPPLEMENTAL COULD BE PROPOSED. HOWEVER, THE DEPARTMENT HAS NOT MADE ANY SUPPLEMENTAL REQUESTS RELATED TO MAJOR ACQUISITIONS IN THE LAST SEVERAL YEARS.

OVERALL WE BELIEVE OUR SYSTEM DOES DEVELOP ADEQUATE DOCUMENTATION FOR OUR MAJOR ACQUISITION PROPOSALS. THE ANNUAL APPROPRIATIONS REQUEST AND REPROGRAMMING PROCEDURES PROVIDE CONGRESS TIMELY INFORMATION. MODIFICATIONS TO PROPOSALS ARE A MATTER FOR CONGRESSIONAL DECISION AND OUR SYSTEM PROVIDES FOR YOUR REVIEW AND INPUT.

I WOULD NOW LIKE TO DESCRIBE THE RELATIONSHIP OF PROCUREMENT OPERATIONS TO MAJOR ACQUISITION PROGRAMS.

PROCUREMENT PROCESS

PROCUREMENT OF MAJOR SYSTEMS IN THE DEPARTMENT OF COMMERCE IS DONE PURSUANT TO OMB CIRCULAR A-109 WHICH GOVERNS THE ACQUISITION OF MAJOR SYSTEMS. IN OUR IMPLEMENTATION OF A-109, WE HAVE INSTITUTED THE FOLLOWING THRESHOLDS:

1. A SYSTEM HAVING CUMULATIVE COST OF $10 MILLION OR MORE FOR RESEARCH, DEVELOPMENT, TEST AND EVALUATIONS PHASES, OR

2. A CUMULATIVE COST OF $30 MILLION OR MORE FOR THE PRODUCTION OR PROCUREMENT PHASES.

BOTH OMB CIRCULAR A-109 AND THE DEPARTMENT'S IMPLEMENTATION MANDATE DECISIONS BY THE HEAD OF THE AGENCY AT FOUR KEY POINTS IN THE MAJOR SYSTEM ACQUISITION PROCESS. THE APPROVAL OF THE SECRETARY OF COMMERCE IS REQUIRED TO (1) INITIATE A MAJOR SYSTEM ACQUISITION, (2) DEMONSTRATE COMPETITIVE SYSTEM DESIGN CONCEPTS, (3) COMMIT A SYSTEM TO FULL SCALE DEVELOPMENT, AND (4) ORDER FULL PRODUCTION OF THE SYSTEM. THESE KEY DECISIONS ARE CONTROL POINTS IN THE ACQUISITION PROCESS. THEY REQUIRE REEXAMINATION OF ALL ASPECTS OF THE PROGRAM INCLUDING LIFE CYCLE COST ESTIMATES AND RESOURCE REQUIREMENTS. ON THE BASIS OF THIS REEXAMINATION, THE SECRETARY CAN REAFFIRM THAT THE MISSION NEEDS AND PROGRAM OBJECTIVES CONTINUE TO EXIST OR THAT THE PROGRAM SHOULD BE HALTED.

THERE ARE OTHER CONTROLS INHERENT IN THE A-109 ACQUISITION PROCESS WHICH PROVIDE OPPORTUNITIES FOR MANAGEMENT OVERSIGHT. FOR EXAMPLE, PROGRAM MANAGERS ARE REQUIRED TO MEASURE PROGRESS AGAINST PROGRAM GOALS AND

OBJECTIVES. THE DEPARTMENT REQUIRES A PROJECT CONTROL SYSTEM TO SCHEDULE, MONITOR AND REGULARLY REPORT ON ALL ASPECTS OF EACH MAJOR ACQUISITION. REPORTS OF THIS KIND ARE SUBMITTED TO TOP MANAGEMENT WITHIN THE DEPARTMENT.

AS AN EFFECTIVE MEANS OF CONTROLLING COST GROWTH, THE PROCESS REQUIRES COMPETITION THROUGH THE TEST AND DEMONSTRATION PHASE.

IF COMPETITION IS TO BE ELIMINATED BEFORE COMPLETION OF THE TEST AND DEMONSTRATION PHASE, THE DECISION MUST BE MADE BY THE SECRETARY AND CONGRESS MUST BE NOTIFIED THROUGH THE CONGRESSIONAL AUTHORIZATION AND APPROPRIATIONS COMMITTEES.

ONGOING MAJOR ACQUISITIONS

I UNDERSTAND THE COMMITTEE IS INTERESTED IN SEVERAL ONGOING MAJOR ACQUISITION PROGRAMS IN THE DEPARTMENT. I WILL DESCRIBE EACH BRIEFLY IN ORDER TO FACILITATE ANY QUESTIONS YOU MAY WISH TO RAISE.

THE FOUR PROGRAMS I WILL DESCRIBE ARE ALL FUNDED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). THEY ARE THE AUTOMATION OF FIELD OPERATIONS AND SERVICES (AFOS) PROGRAM, THE NEXT GENERATION WEATHER RADAR (NEXRAD) PROGRAM, THE GEOSTATIONARY SATELLITE (GOES), AND THE CONSTRUCTION OF NOAA'S WESTERN REGIONAL HEADQUARTERS AT SAND POINT, SEATTLE, WASHINGTON.

THE AFOS PROGRAM WAS UNDERTAKEN IN 1974 TO MODERNIZE COMMUNICATIONS AND IMPROVE FORECASTING TECHNIQUES IN THE WEATHER SERVICE. AFOS SYSTEMS HAVE BEEN INSTALLED AT OVER 200 STATIONS IN FOUR REGIONAL LOOPS THROUGHOUT THE COUNTRY. THE CENTRAL AND WESTERN REGIONS ARE OPERATIONAL AND THE FULL SYSTEM WILL BE OPERATIONAL BY THE END OF FY 1982. A TOTAL OF $85 MILLION HAS BEEN SPENT ON THE PROGRAM THROUGH 1981. THE 1982 APPROPRIATION IS $11.5 MILLION.

THE NEXRAD PROGRAM IS IN ITS EARLY STAGES TO DEVELOP A DOPPLER RADAR SYSTEM TO REPLACE THE AGING 1957 RADARS NOW IN USE. IT IS A JOINT PROGRAM WITH DOD AND FAA. THE NEW RADARS WILL INCREASE WARNING LEAD TIMES AND ACCURACY OF DETECTION OF SEVERE STORM EVENTS, PARTICULARLY TORNADOS. MAJOR PROCUREMENT ACTIVITIES ARE NOT EXPECTED BEFORE THE LATE 1980'S. NEXRAD IS FUNDED AT $5 MILLION IN 1982.

TWO GOES SATELLITES ARE IN OPERATION AT ALL TIMES OVER THE UNITED STATES. THE GOES SYSTEM PROVIDES BOTH VISIBLE AND INFRARED IMAGES OF THE WESTERN HEMISPHERE EVERY 30 MINUTES, AND CAN PROVIDE SELECTED COVERAGE MORE FREQUENTLY WHEN REQUIRED. THESE SATELLITES ARE THE MAJOR MEANS OF TRACKING LARGE SCALE EVENTS SUCH AS HURRICANES AND SEVERE STORMS. WINDS PROJECTIONS AID IN FORECASTING. THE SATELLITES ARE PURCHASED IN SERIES THROUGH ANNUAL APPROPRIATIONS. THE 1982 BUDGET IS $27 MILLION AND THE COST OF THE CURRENT SERIES OF GOES SATELLITES (GOES D-I) THROUGH 1987 IS $361 MILLION.

NOAA'S WESTERN REGIONAL HEADQUARTERS AT SAND POINT IS UNDER CONSTRUCTION AND WILL BE COMPLETED IN FY 1983. FUNDS TOTALING $77.5 MILLION WERE APPROPRIATED FROM 1977 TO 1979 FOR THE PROJECT. SINCE THE CONGRESS APPROVED AN $11 MILLION RESCISSION IN THE PLAN, THE PROJECT HAS BEEN SCALED BACK BY ELIMINATION OF THE TRAINING CENTER AND RECEPTION BUILDING, AND REDUCTIONS IN THE DOCKING FACILITIES PLANNED.

PRELIMINARY OBSERVATIONS ON S.2397

THE DEPARTMENT OF COMMERCE SUPPORTS THE NEED FOR ADEQUATE CONTROLS TO REDUCE COST OVERRUNS ON MAJOR ACQUISITIONS AND ASSURE PROMPT CONGRESSIONAL NOTIFICATION OF CHANGES TO THESE PROGRAMS. WE HAVE SOME PRELIMINARY CONCERNS THAT S.2397 AS INTRODUCED MAY NOT BE NECESSARY TO ACCOMPLISH THIS AND COULD RESULT IN OPERATION PROBLEMS FOR AFFECTED AGENCIES.

AS I HAVE OUTLINED IN THIS TESTIMONY, OUR APPROPRIATIONS PROCESS PROVIDES FOR CONGRESSIONAL REVIEW ANNUALLY OF EACH MAJOR ACQUISITION. CHANGES ARE HIGHLIGHTED IN THE BUDGET AND ARE NOT BURIED IN DETAIL. IF CHANGES ARE NECESSARY TO CONGRESSIONALLY APPROVED PLANS, OUR REPROGRAMMING LIMITS ARE AT A VERY LOW LEVEL AND CAPTURE ANY SIGNIFICANT CHANGE. THEREFORE, ADDING AN ADDITIONAL REPORTING REQUIREMENT WILL NOT PROVIDE ANY MORE INFORMATION OR CONTROL FOR THE CONGRESS IN OUR VIEW.

THE BILL AS INTRODUCED COULD CAUSE SIGNIFICANT OPERATIONAL PROBLEMS FOR THE DEPARTMENT. SINCE THE BILL ESTABLISHES A STANDARD OF INCREASED COSTS OF 25 PERCENT GREATER THAN ORIGINALLY JUSTIFIED TO CONGRESS, IT IS NOT APPARENT

WHETHER CHANGES TO THE ACQUISITION PROGRAM APPROVED IN THE REGULAR APPROPRIATIONS PROCESS BY CONGRESS WOULD BE EXEMPTED FROM THE 25 PERCENT LIMIT. IF NOT, PROGRAMS COULD BE HALTED IN MID-COURSE, DISRUPTING COMPLETION AND INCREASING FUTURE COSTS TO THE GOVERNMENT. I BELIEVE THAT, IF THIS LEGISLATION IS ENACTED, A BETTER APPROACH WOULD BE TO REQUIRE CONGRESSIONAL RESPONSE WITHIN A LIMITED TIME UPON NOTIFICATION BY OMB OF A COST GROWTH OF 25 PERCENT OR MORE FOR A GIVEN ACQUISITION. THIS WOULD BE SIMILAR TO REPROGRAMMING AND RESCISSION PROCESSES WHICH PROVIDE 15 DAY AND 45 DAY CONGRESSIONAL REVIEW PERIODS RESPECTIVELY.

THE DEPARTMENT CAN PROVIDE A MORE DETAILED ANALYSIS OF THE BILL FOR THE RECORD IF THE COMMITTEE DESIRES. THANK YOU FOR THE OPPORTUNITY FOR APPEARING TODAY AND I WILL BE PLEASED TO ANSWER ANY QUESTIONS YOU MAY HAVE.

Chairman ROTH. The hearing is adjourned.

[Whereupon, at 12:41 p.m. the hearing was adjourned subject to the call of the Chair.]

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

97TH CONGRESS
2D SESSION

S. 2397

To require (1) the enactment of special legislation to continue the expenditure or obligation of funds on any major civil acquisition initiated after January 1, 1982, whenever the cost of such acquisition has increased or, on the basis of estimates, will increase over the initial estimate when the project was justified to the Congress by 25 per centum or more, and (2) reporting of status information on all major civil acquisitions.

IN THE SENATE OF THE UNITED STATES

APRIL 19 (legislative day, APRIL 13), 1982

Mr. ROTH introduced the following bill; which was read twice and referred to the Committee on Governmental Affairs

A BILL

To require (1) the enactment of special legislation to continue the expenditure or obligation of funds on any major civil acquisition initiated after January 1, 1982, whenever the cost of such acquisition has increased or, on the basis of estimates, will increase over the initial estimate when the project was justified to the Congress by 25 per centum or more, and (2) reporting of status information on all major civil acquisitions.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. That as used in this Act—

(1) the term "major civil acquisition" means any construction, acquisition, or procurement financed in whole or in part with Federal funds (included Federal grant funds, but not including any funds allocated to a State under a revenue-sharing program), the estimated cost of which, including research, development, testing, and evaluation costs, in terms of Federal funds, exceeds $50,000,000;

(2)(a) the term "initial estimate" as applied to new starts after January 1, 1982, means the total program cost estimated at the time the project was originally justified to the Congress;

(b) the term "initial estimate" as applied to projects started prior to January 1, 1982, means the current total estimated cost at that date.

SEC. 2. (a) The Office of Management and Budget shall be responsible for determining cost growth statistics and compiling status information on all major civil acquisitions. Such statistics and status information shall be determined and compiled on the basis of data furnished to the Office of Management and Budget by the appropriate departments and agencies of the Government as specified in subsection (b) of this section.

(b) The Office of Management and Budget shall require the heads of agencies and departments to provide on a quar-

terly basis for subsequent reporting to the Congress on an agencywide basis, all data and information required by the Office of Management and Budget to determine cost growth statistics and compile status information on all major civil acquisitions. Such data shall include, as a minimum for each such major civil acquisition:

(1) a description of the acquisition in relation to performance and mission expectations;

(2) the initial cost estimate;

(3) a current cost estimate as of the end of the reporting period;

(4) the total amounts of funds authorized, funds appropriated, and funds obligated for the acquisition through the end of the reporting period;

(5) the currently estimated or actual completion date of the acquisition and the originally planned completion date;

(6) the reason(s) for any differences in excess of six months between the originally planned completion date and the current estimated or actual completion date;

(7) all changes in the quantity or size of the acquisition from the quantity or size originally planned;

(8) the reason(s) for quantity and/or size changes;

(9) the reason(s) for any actual or estimated projected cost growth of 25 per centum or more compared to the initial estimates; and

(10) action(s) taken and proposed to be taken to control future cost growth of such acquisition.

(c) The Office of Management and Budget shall also develop standardized policies and procedures for treatment of inflation in connection with cost data provided pursuant to this section which would apply uniformly and consistently to all agencies and departments.

SEC. 3. (a) Whenever the Director of the Office of Management and Budget determines in the case of any major civil acquisition that the actual cost or estimated projected cost of such acquisition has resulted or will result in a cost growth of 25 per centum or more compared to the initial estimate he shall promptly notify the Congress of his finding and provide:

(1) a statement of reasons for cost increase;

(2) all actions taken and proposed to be taken to control future cost growth of such acquisition;

(3) any changes in the quantity estimates or schedule milestones of the acquisition and the degree to which such changes have contributed to the increase in cost; and

(4) an index of all testimony and documents formally provided the Congress on the estimated cost of such acquisition.

(b) After the date on which the Director of the Office of Management and Budget notifies the Congress as described in subsection (a) relating to any major civil acquisition, no additional funds may be obligated or expended with respect to such acquisition (except where the Government has an existing legal liability to pay) unless authorizing legislation as described in subsection (c) is enacted by the Congress after date of such notice. In determining the cost growth with respect to any major civil acquisition for purposes of suspending obligations or expenditures the Office of Management and Budget shall exclude any amount from such cost growth attributable to inflation.

(c) Legislation referred to in subsection (b) means a bill or joint resolution which (1) pertains only to the continuation of the authority to obligate and expend funds for a major civil acquisition with respect to which the authority to obligate and expend funds has been terminated as the result of a notice issued by the Director of the Office of Management and Budget under subsection 3(a), and (2) continues for a period of not more than one year from the date of enactment of such bill or joint resolution the authority to obligate and expend funds for such acquisition.

General
Services
Administration Washington, DC 20405

SEP 23 1982

Honorable William V. Roth, Jr.
Chairman
Committee on Governmental Affairs
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

This is in response to the General Accounting Office final report entitled "Better Information Management Could Alleviate Oversight Problems With GSA's Construction Program" (PLRD-82-87), dated July 9, 1982.

GSA is in substantial agreement with the report's findings and recommendations. Our specific comments on the recommendations are contained in the enclosure to this letter.

Sincerely,

Ray Kline

Administrator

Enclosures

GSA Comments on the GAO Final Report
Entitled "Better Information Management Could Alleviate
Oversight Problems With GSA's Construction Program"
(PLRD-82-87) Dated July 9, 1982

Recommendation: Conduct a post-implementation system review of RACATS to determine whether it should be redesigned to collect and analyze all the data necessary to provide complete project performance information or whether a more suitable existing system should be acquired.

Response: The Public Buildings Service will conduct a post-implementation review of the RACATS system.

Recommendation: Require that the Commissioner of Public Buildings Service enforce adherence to Federal Information Processing Standards (FIPS) by user organizations.

Response: PBS currently employs applicable FIPS standards in all centrally developed and maintained systems. In addition, we will advise regional offices to employ applicable FIPS standards in the development of any local applications.

Recommendation: Require that regions document all non-standard RACATS programs fully and the regions submit this documentation to the Central Office where it will be kept on file for control purposes.

Recommendation: Require that a full and complete inventory be made of all non-standard programs and that a listing of all available programs be disseminated to the regions.

Response: PBS will require regional offices to submit to the Central Office copies of all non-standard RACATS programs and documentation of those programs. This documentation will be maintained in the Central Office and its availability will be advertised to all users of the RACATS system.

Recommendation: Acquire computer graphics capability which is cost effective to eliminate manual efforts expended in preparing management reports.

Response: PBS is acquiring graphics equipment for use in the Central Office and it will be employed for management reporting associated with the construction program and other PBS programs. This capability will then be evaluated for usefulness in meeting the needs outlined in the GAO report.

Recommendation: Correct the input error problem through training, and possibly by acquiring better input devices, such as optical readers or other new input technology.

Response: PBS will develop a program for systematic follow-up training on input procedures for RACATS. We will also investigate the nature of input errors and evaluate the potential for elimination of such errors by use of optical readers or other new input technology.

Recommendations:

° Appoint a senior official experienced in information management as the permanent information resources manager, designated at assistant administrator or equivalent level, reporting directly to him (The Administrator), with the sole responsibilities of this official being to implement the Paperwork Reduction Act of 1980 and assume all the duties required by the act.

° Require top management's involvement and cooperation in IRM and emphasize the senior IRM official's authority over all GSA IRM activities.

° Establish a central IRM office, headed by the senior official, consolidating existing offices. This office should include such IRM-related subcomponents as deemed necessary for the senior official to carry out his/her responsibilities.

Response: On August 17, 1982, GSA established an Office of Information Resources Management (OIRM). The Automated Data and Telecommunications Service (ADTS) was abolished and its functions (including the government-wide records management function and the Federal Information Center program which had been transferred to ADTS earlier this year) were transferred to the new Office. The Consumer Information Center was also transferred to OIRM. The Office of Data Systems was abolished and its functions, except those that were identifiably dedicated to specific services or staff offices, were transferred to OIRM. The other functions of the Office of Data Systems were transferred to the appropriate service or staff office. Finally, the agency's paperwork management functions were placed under the purview of OIRM. We have thereby consolidated those information resources management activities that we deem necessary to meet our responsibilities under the Paperwork Reduction Act of 1980 (PL 96-511). As a result of these changes, OIRM is responsible for both GSA's government-wide and internal IRM functions. After careful analysis of several alternatives we decided on this arrangement because it will provide us with the highest degree of accountability and efficiency in meeting our IRM responsibilities.

Mr. Frank Carr, formerly Commissioner of ADTS and a senior official experienced in information management, has been appointed as Assistant Administrator for Information Resources Management, reporting directly to the Administrator of General Services. In that position he serves as the senior official in GSA to carry out the provisions of PL 96-511. Mr. Carr therefore performs on

a permanent basis the duties initially assigned on a temporary basis to the Deputy Administrator of GSA. (See attached GSA directive, OHR P 5440.1 Chge 34, which documents all of the organizational changes described above.)

Recognizing the need for top management involvement and cooperation in the agency's IRM program, GSA is setting up an Information Resources Management Committee which will be chaired by Mr. Carr. This Committee will function as the board of directors for the agency's information resources activities. Its membership will include nearly all of the senior level management officials in the agency. Formal establishment of this committee, whose functions and membership are described in detail in the attached draft directive, is expected within one month.

GENERAL SERVICES ADMINISTRATION
Washington, DC 20405

OMR P 5440.1 CHGE 34
August 17, 1982

GSA ORDER

SUBJECT: GSA Organization Manual

1. Purpose. This order transmits revised pages for inclusion in the GSA Organization Manual.

2. Cancellations. GSA Orders ADM 5440.231, ADM 5440.240, ADM 5440.251, and ADM 5440.273 are canceled.

3. Background. The Paperwork Reduction Act of 1980 (P.L. 96-511) assigned GSA a lead role in the policy formulation and oversight of Federal information resources management. The Act also required that each agency examine its organization structure to provide coordinated management of its information activities. To ensure that these functions are carried out with the highest degree of efficiency requires consolidation of GSA Government-wide information resources management activities and central control over internal GSA ADP activities. Therefore, the Office of Information Resources Management is established to consolidate these activities.

4. Explanation of changes. This order includes the following changes in the Central Office organization of GSA:

a. Establishment of a new Office of Information Resources Management, headed by an Assistant Administrator, and composed of the following structure:

(1) Office of the Assistant Administrator
(2) Office of the Executive Director
(3) Office of Systems and Technology Assessment
(4) Deputy Assistant Administrator for Federal Information Resources Management
(5) Office of Information Resources Management Policy
(6) Office of Advanced Planning
(7) Office of Office Information Systems
(8) Deputy Assistant Administrator for Central Information Services
(9) Office of Software Development
(10) Office of Information Services
(11) Office of Network Services
(12) Office of Information Resources Procurement
(13) Office of Regional Information Services
(14) Office of GSA Information Systems

b. Abolishment of the Automated Data and Telecommunications Service and the transfer of its functions to the Office of Information Resources Management.

Distribution: A; B; F; G: H; plus SPC H145

Attachment

c. The functions of the Office of Data Systems, Office of Plans, Programs, and Financial Management (PPFM), related to systems development, analysis, and maintenance that are identifiably dedicated to specific services or staff offices are transferred to the appropriate service or staff office.

d. Abolishment of the Office of Data Systems, PPFM, and the transfer of its functions, except those related to systems development, analysis, and maintenance that are identifiably dedicated to specific services or staff offices, to the Office of Information Resources Management.

e. Abolishment of the Consumer Information Center, Office of Public Affairs, and transfer of its functions to the Office of Information Resources Management.

f. The functions and responsibilities of the Information Management Division, Office of Administrative Services, Office of Oversight, that are directly related to paperwork management and the authorities of the senior official for the Paperwork Reduction Act of 1980, will be carried out in accordance with the general policies developed by the new Office of Information Resources Management.

g. Chs. 11, 12, 13, 14, 15, 20, 22, and 23 of the Manual are revised; ch. 19 is withdrawn and reserved; and ch. 25 is added to reflect the above changes in organization.

h. Ch. 12 is further revised to reflect the Indian Trust Accounting Division in the Office of Finance, PPFM.

i. Changes to ch. 1 of the Manual are not included in this change and will be reflected at a later date.

5. Implementing actions.

a. The Assistant Administrator, Office of Information Resources Management, as soon as possible, shall issue at the program level the organizational structure and functional statements below the division level.

b. Management shall notify recognized labor organization of this change and, upon request, shall meet and discuss its impact on employees represented by the union to the extent required or permitted by applicable laws, regulations, and the negotiated agreement. Classification of all positions affected by this reorganization is subject to normal classification procedures.

6. Effective date. These changes are effective immediately and are to be fully implemented by September 30, 1982 (for budget and accounting purposes, the effective date is October 1, 1982).

7. Instructions. Remove and insert the following pages:

Remove pages	Insert pages
i and ii, general table of contents	same
ch. 1	ch. 1
1 and 2	same
ch. 11	ch. 11
8	same
ch. 12	ch. 12
i and ii, table of contents	same
1 thru 6	same
9 thru 18	same
31 thru 80	same
ch. 13	ch. 13
27 thru 32	same
ch. 14	ch. 14
12	same
ch. 15	ch. 15
i and ii, table of contents	same
1 thru 18	same
ch. 19	ch. 19
tab divider and entire ch. 19	tab divider and p. i and ii
ch. 22	ch. 22
i thru iv, table of contents	same
1 thru 4	same
14 thru 22	same
26 thru 32	same
45	same
55	same
63 thru 72	same
ch. 23	ch. 23
21 thru 28	same
ch. 25	ch. 25
tab divider and p. i and ii	tab divider and entire ch. 25

Jon R Halsall

BOND R. FAULWELL
Director of Organization
and Personnel

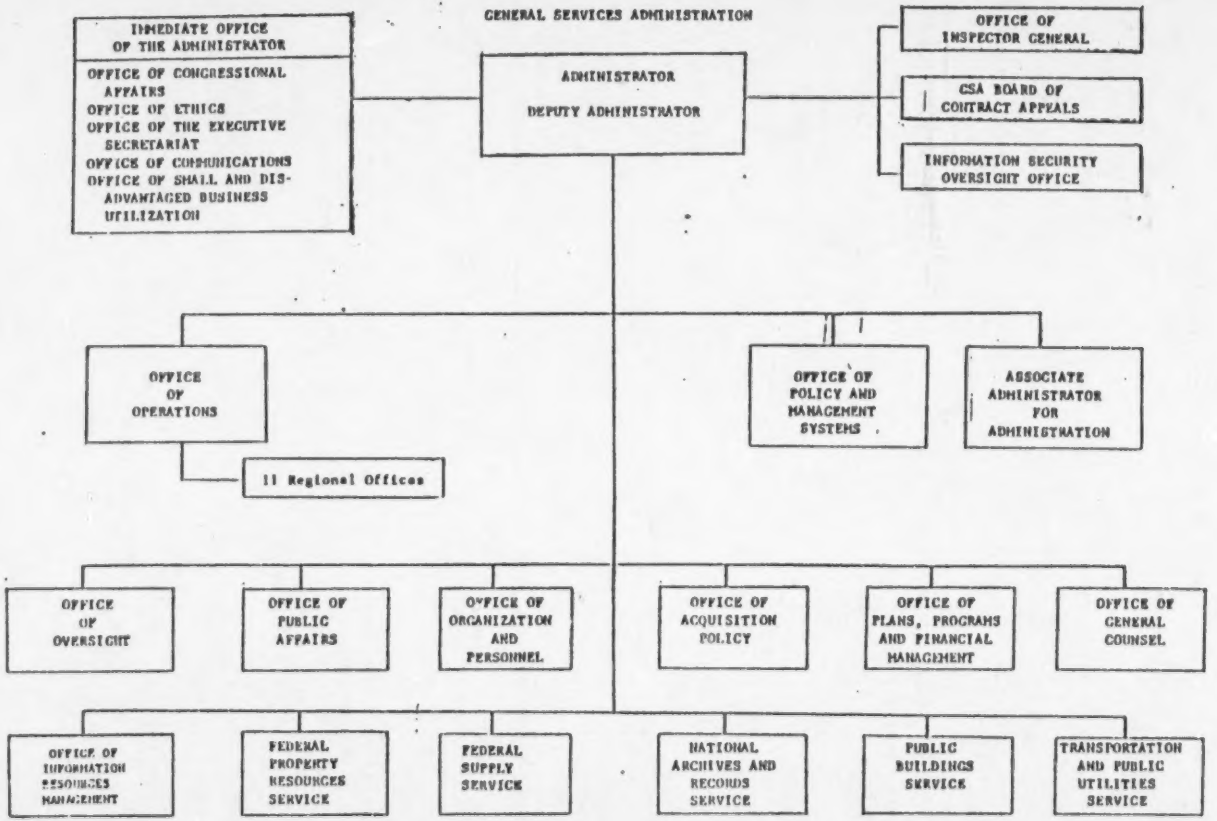
GENERAL SERVICES ADMINISTRATION
IMMEDIATE OFFICE OF THE ADMINISTRATOR
OFFICE OF CONGRESSIONAL AFFAIRS
OFFICE OF ETHICS
OFFICE OF THE EXECUTIVE SECRETARIAT
OFFICE OF COMMUNICATIONS
OFFICE OF SMALL AND DISADVANTAGED BUSINESS UTILIZATION
ADMINISTRATOR
DEPUTY ADMINISTRATOR
OFFICE OF INSPECTOR GENERAL
GSA BOARD OF CONTRACT APPEALS
INFORMATION SECURITY OVERSIGHT OFFICE
OFFICE OF OPERATIONS
11 Regional Offices
OFFICE OF POLICY AND MANAGEMENT SYSTEMS
ASSOCIATE ADMINISTRATOR FOR ADMINISTRATION
OFFICE OF OVERSIGHT
OFFICE OF PUBLIC AFFAIRS
OFFICE OF ORGANIZATION AND PERSONNEL
OFFICE OF ACQUISITION POLICY
OFFICE OF PLANS, PROGRAMS AND FINANCIAL MANAGEMENT
OFFICE OF GENERAL COUNSEL
OFFICE OF INFORMATION RESOURCES MANAGEMENT
FEDERAL PROPERTY RESOURCES SERVICE
FEDERAL SUPPLY SERVICE
NATIONAL ARCHIVES AND RECORDS SERVICE
PUBLIC BUILDINGS SERVICE
TRANSPORTATION AND PUBLIC UTILITIES SERVICE

Figure 1-8.1. GSA organization chart

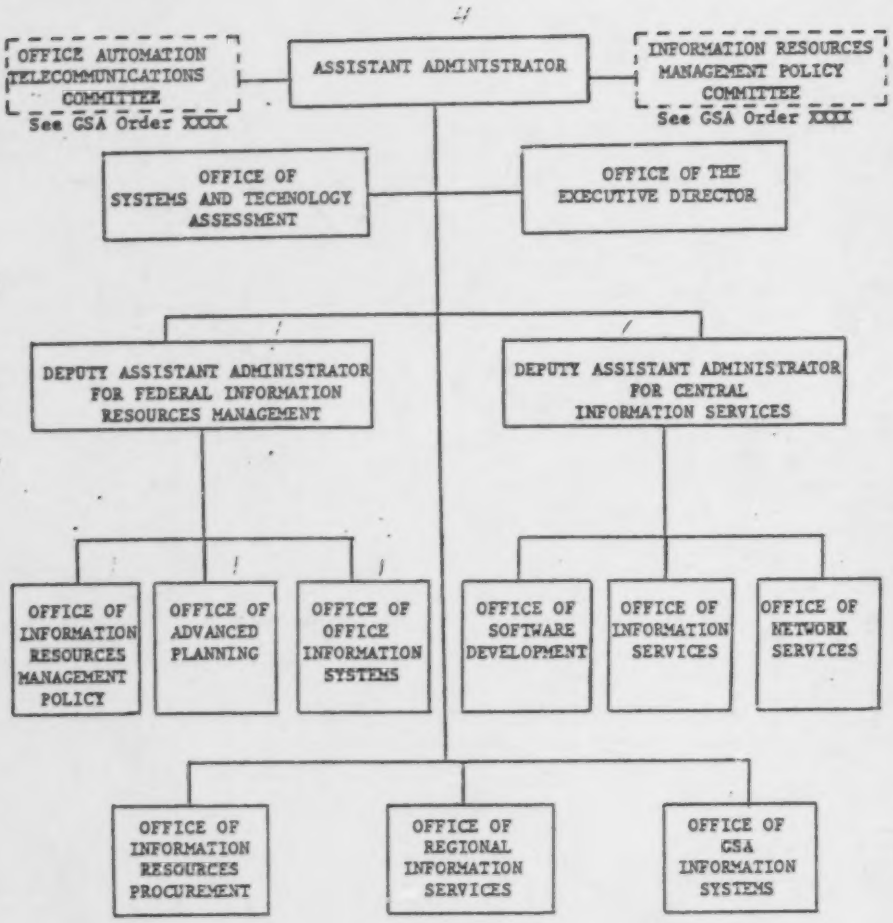
OFFICE AUTOMATION TELECOMMUNICATIONS COMMITTEE
See GSA Order XXXX
ASSISTANT ADMINISTRATOR
INFORMATION RESOURCES MANAGEMENT POLICY COMMITTEE
See GSA Order XXXX
OFFICE OF SYSTEMS AND TECHNOLOGY ASSESSMENT
OFFICE OF THE EXECUTIVE DIRECTOR
DEPUTY ASSISTANT ADMINISTRATOR FOR FEDERAL INFORMATION RESOURCES MANAGEMENT
DEPUTY ASSISTANT ADMINISTRATOR FOR CENTRAL INFORMATION SERVICES
OFFICE OF INFORMATION RESOURCES MANAGEMENT POLICY
OFFICE OF ADVANCED PLANNING
OFFICE OF OFFICE INFORMATION SYSTEMS
OFFICE OF SOFTWARE DEVELOPMENT
OFFICE OF INFORMATION SERVICES
OFFICE OF NETWORK SERVICES
OFFICE OF INFORMATION RESOURCES PROCUREMENT
OFFICE OF REGIONAL INFORMATION SERVICES
OFFICE OF GSA INFORMATION SYSTEMS

Figure 25-1. Office of Information Resources Management organization chart

PART 2. OFFICE OF THE ASSISTANT ADMINISTRATOR

4. Assistant Administrator.

a. Plans and administers the activities of the Office of Information Resources Management (OIRM) in the development of overall objectives, long-range plans, comprehensive programs, and organization and operating methods necessary to accomplish established program objectives; maintains liaison with other executive agencies to develop and maintain information resources management programs; develops and recommends to the Administrator policies, regulations, and procedures for Government-wide application governing the management, procurement, and use of automatic data processing, office information systems, and telecommunications equipment and services; develops and recommends to the Assistant Administrator for Acquisition Policy policies, regulations, and procedures for Government-wide application governing the acquisition of information resources; provides policy, program, and procedural guidance to the regions in coordination with the Associate Administrator for Operations; prepares annual plans and budgets for the OIRM programs; issues policies and procedures governing internal Central Office and regional performance of OIRM program activities; directs the management and operation of the Federal Information Center Program and the Consumer Information Center; and develops and assigns program management and project management responsibilities in accordance with agency procedures.

b. Serves as the senior official in GSA to carry out the provisions of the Paperwork Reduction Act of 1980 and of the Office of Management and Budget (OMB) Bulletin 18-21. In this connection the specific functions are: *

(1) Serves as the principal advisor to the Administrator of General Services on information policy issues.

(2) Ensures the development and implementation of GSA policies, principles, standards, guidelines, and procedures pertaining to the management of information activities.

(3) Ensures, in accordance with OMB guidelines, the development of appropriate GSA plans and budgets for information activities.

(4) Ensures the development and application of GSA procedures for the periodic review of activities associated with the collection, management, use, and dissemination of information.

(5) Ensures the review of proposed GSA public information collection requests and reporting and recordkeeping requirements, including those contained in rules and regulations, to ensure that they impose the minimum burden upon the public and have practical utility for GSA. Ensures that the public has an adequate opportunity to participate in the development of proposed GSA public information collection requests and information policies.

(6) Reviews proposed GSA public reporting and recordkeeping requirements prior to submission to OMB for clearance. Ensures compliance with OMB guidelines on information collection requests.

(7) Ensures development and implementation of GSA procedures for compliance with the requirements of the Federal Information Locator System in OMB's Office of Information and Regulatory Affairs.

(8) Ensures the development of GSA procedures for assessing the paperwork and information reporting burden of proposed legislation relating to agency activities.

(9) Ensures that GSA programs use information technology in an effective, efficient, and economic manner.

(10) Promotes innovative applications of information technology to GSA programs and advises managers on the appropriate use of such technology.

(11) Assumes responsibility for the conduct and accountability for GSA's acquisitions of ADP and telecommunications equipment and services, pursuant to a delegation of authority under the Brooks Act from the Administrator of General Services. Ensures the development of acquisition guidelines and procedures. Reviews and coordinates ADP and telecommunications equipment plans and, in collaboration with the Office of Acquisition Policy, sets acquisition threshold levels and approves acquisition requests at appropriate threshold levels.

(12) Ensures that GSA information systems do not unnecessarily overlap or duplicate each other or those of other agencies.

(13) Ensures development and application of procedures for confidentiality of information collected, used, or maintained by GSA.

(14) Ensures the development and application of GSA policies and procedures pertaining to the protection, privacy, and confidentiality of information collected, used, or maintained by GSA.

(15) Ensures the integrity and continuity of GSA's information systems.

(16) Assists and advises GSA managers on their program activities insofar as they involve the collection, management, or dissemination of information.

(17) Serves as GSA's principal point of contact on interagency and intergovernmental matters involving information issues.

(18) Ensures that GSA assists OMB in the performance of its tasks and responsibilities assigned by the Paperwork Reduction Act of 1980 when requested to do so.

5 and 6. Reserved.

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GENERAL SERVICES ADMINISTRATION
Washington, DC 20405

IRM

GSA ORDER

SUBJECT: Information Resources Management Committee

1. Background.

a. The opportunities for using information technology to support the programs of Government agencies have increased significantly over the past decade. This expansion of cost effective uses of information technology in Government and the essential role of users in defining new applications has increased the need for agency top management to make strategic choices. The information required to make such choices effectively must come from senior agency managers, who can maintain a high level perspective. This is the main force behind the formation of an Executive Steering Committee for information resources management.

b. The Executive Steering Committee functions as the board of directors for the agency's information resources activities. It sets a strategic direction for information resources management and determines the multiyear financial commitment. It provides a forum where senior managers and users can discuss this direction, match agency concerns with technological potential, and build committment to policies.

2. Functions.

a. Direction Setting.

(1) The direction-setting function of the Executive Steering Committee links agency program strategy and information technology strategy. It consists of setting objectives for the use of computers and telecommunications, formulating strategy to focus on these goals, devising policies to ensure that the organization's actions are consistent with these objectives, and reviewing and approving the long-range plan to guarantee that the approach for achieving these goals is workable and is in line with the agency's priorities and capabilities.

(2) The agency's budgeting process should govern the information resources management activity, as they do other agency functions. However, this financial process must have the benefit of a long-range plan since the effective management of information resources is a multi-year proposition.

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(3) The long-range plan will be the principal management tool for documenting objectives, specifying costs and milestones, and providing a basis for measuring performance. It will be supplemented by project management reviews and annual audit reviews.

(4) An important part of the long-range plan is the technology plan, which identifies the computer-based technolgies and telecommunications technologies important to the agency's activities and draws up guidelines for implementing these technologies. The implementation of computer and telecommunications projects utilizing new technology often requires extensive organizational change. Since both of these acpects involve risk, it is essential to develop a process whereby the potential benefits of proposed projects are assessed against their potential risks.

b. Monitoring.

(1) In the execution of a long-range plan, the unexpected inevitably happens. Since only the issues that significantly affect the long-range plan or policy should come to the Executive Steering Committee for its advice, a structure for presenting issues is necessary. Realistic long-range planning requires project management reviews and reviews of annual audits of performance against the long-range plan.

(2) The project management system should be a working tool of the information resources activities and the program offices. Only summary information on milestones and resource consumption should be presented to the Executive Steering Committee at the time of project management reviews.

(3) The audits review is best done annually and should be conducted an an outsider to ensure objectivity. The audits review plays a central role in helping the Committee learn about opportunities and issues in applying information technology.

(4) It is important to maintain the attitude that the performance review is as much a test of the soundness of the plan as it is of the ability to the organization to implement the plan. The Executive Steering Committee must determine in problem situations whether the plan should be changed and what actions should be taken to increase the organization's capability to implement the change. The latter may include increases in resource committment, adjustments to organization structure or changes in personnel assignments. Only the need for these changes should be identified by the Executive Steering Committee; the corrective action should be taken by the appropriate individual having the management responsibility in the problem area.

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3. Membership. The strategic importance of computer actiities to the agency reinforces the need for senior-management involvement. The membership should be limited to no more than 10 members. Having more than 10 members results in one-way rather than two-way communications which prevents the Committee from accomplishing its objectives. The Chairman designated agency single official for the implementation of P.L. 96-511, will be the Assistant Administrator for Information Resources Management. Other Committee members will consist of the following:

Commissioner, Public Buildings Service
Assistant Administrator for Plans, Programs, and Financial Management
Assistant Administrator for Personal Property
Archivist of the United States
Director, Office of Organization and Personnel
Director, Office of Oversight
Associate Administrator for Administration
Associate Administrator for Policy and Management Systems
Associate Administrator for Operations

4. Staff support. The first year is the most critical for the Executive Steering Committee. The members simply become frustrated because they lack at the outset the knowledge to set effective information resources management strategy. If the executive steering committee is to deal with agency-wide issues effectiely, staff must be available to do pertinent background work, including quantitative data analysis. Needed staff support will be provided by the Office of GSA Information Systems, OIRM.

5. Meetings. Meetings will be held quarterly and will be two hours long. This frequency is enough to meet the constraints of senior manager's time while giving them sufficient opportunity to deal with important matters.

FRANK J. CARR
Assistant Administrator
Office of Information
Resources Management

WILLIAM V. ROTH, JR., DEL., CHAIRMAN
CHARLES H. PERCY, ILL. — THOMAS F. EAGLETON, MO.
TED STEVENS, ALASKA — HENRY M. JACKSON, WASH.
CHARLES MC C. MATHIAS, JR., MD. — LAWTON CHILES, FLA.
JOHN C. DANFORTH, MO. — SAM NUNN, GA.
WILLIAM S. COHEN, MAINE — JOHN GLENN, OHIO
DAVID DURENBERGER, MINN. — JIM SASSER, TENN.
MACK MATTINGLY, GA. — DAVID PRYOR, ARK.
WARREN B. RUDMAN, N.H. — CARL LEVIN, MICH.
JOAN M. MC ENTEE, STAFF DIRECTOR
IRA S. SHAPIRO, MINORITY STAFF DIRECTOR

United States Senate
COMMITTEE ON
GOVERNMENTAL AFFAIRS
WASHINGTON, D.C. 20510

May 6, 1982

Honorable Caspar Weinberger
Department of Defense
The Secretary
Washington, D.C. 20310

Dear Mr. Secretary:

As Chairman of the Governmental Affairs Committee, I recently convened hearings to examine a new General Accounting Office study which indicates that there are serious cost growth and schedule slippages affecting many major federal acquisition projects. In addition, the Committee considered at the hearings, S. 2397, the Cost Reduction in Major Procurements Act which I recently introduced in an effort to curb some of the costly and serious management problems affecting major federal acquisition programs. I am enclosing a copy of the bill for your review and comment.

Frankly, I was shocked by the findings contained in the General Accounting Office study and by some of the information revealed by the testimony offered at our Committee's hearing. Cost growth in major federal acquisition projects is a serious, ongoing problem in the agencies which appears to have grown worse since the GAO began issuing annual reports on cost growth in 1975. Though the Defense Department has received the lion's share of the attention for its often extremely costly projects, it at least can be said that DoD is required to inform Congress on a quarterly basis concerning the costs and schedules of its major weapons systems. The Department has also begun to implement a broad set of management initiatives designed to improve the performance of its major acquisition projects.

The civilian agencies, on the other hand, have no regular reporting system to Congress on the status of their major acquisitions. Despite the long-term nature of the cost growth problem the civilian agencies have not developed or adopted comprehensive management improvement initiatives as has the Department of Defense. The General Accounting Office has informed my Committee that the headquarters offices of the civilian agencies often had little or no idea of the status of their major projects and took months to develop and prepare basic management data relating to these projects. In short,

the civilian agencies appear to have serious management shortcomings in overseeing their major federal projects.

To better inform the Committee members on this issue, and prepare it for reviewing and considering S. 2397, I would appreciate your frank responses to the questions which follow. Please have your responses in to the Committee no later than May 26th.

1.) The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

2.) Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

3.) How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

4.) The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

5.) Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

6.) How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?

7.) How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

8.) What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

Sincerely,

William V. Roth, Jr.
Chairman

WVR/le
Enclosure

IDENTICAL LETTERS SENT TO:

Department of Transportation
" " Interior
" " Health & Human Services
" " Treasury
" " State
" " Justice
" " Commerce
" " Energy

National Railroad Passenger Corporation
National Science Foundation
Tennessee Valley Authority
Veterans Administration
NASA
General Services Administration
Architect of the Capitol
Appalachian Regional Commission
U.S. Army Corps of Engineers
Corporation for Public Broadcasting

APPALACHIAN REGIONAL COMMISSION

OFFICE OF THE
EXECUTIVE DIRECTOR
1666 Connecticut Avenue, N.W.
Washington, D.C. 20235
202/673-7874

May 20, 1982

Honorable William V. Roth, Jr.
Chairman, Committee on Governmental Affairs
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This is in response to your letter of May 6, 1982, concerning cost growth on major acquisitions and also requesting our comments on S. 2397. Your particular attention is requested to our answer to the fourth question which corrects information supplied by the General Accounting Office.

1. The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information requested by the GAO? How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

   Answer: Cost data concerning the Appalachian highway system are stored on computer and are catalogued by corridor and cost estimate section.

2. Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

   Answer: Cost data are maintained at a central source.

3. How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

   Answer: The major Federal Acquisitions report was due on November 1, 1981. Our complete report was mailed to the GAO on October 30, 1981.

4. The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

   Answer: In 1965, Congress authorized $805 million as the Federal share of the Appalachian Development Highway System. The Federal cost was based upon a two-lane 2,090-mile system, constructed to the applicable engineering and safety standards of that time.

The current Federal cost, $9.5 billion, used by the GAO as the basis for their findings is for a considerably changed highway system.

Since our initial authorization, Congress has added 1,000 miles to the system; has authorized all of these miles to be constructed upto four lanes, rather than two; has legislated additional safety standards; and has raised the Federal share of the cost of construction of the four-lane sections from 50 percent to 80 percent.

Had these factors been considered by the GAO, as they should have been, the cost base for comparison is $2.9 billion, not the $805 million used in the report. Using this correct base for calculation results in a cost increase of 230 percent -- certainly not desirable, but vastly lower than the 1,084 percent published by the GAO.

Further, to place this increase in perspective, since 1965 inflation has caused general Federal highway construction costs to increase at a rate 27-percent higher than the rate of increase for the Appalachian system.

Enough of the foregoing data were provided to the GAO in our "Financial Status of Major Federal Acquisitions" report for them to recognize that the 1965 and 1982 costs were not comparable and, therefore, the conclusion reached was invalid. We regret they failed to take note of it.

It is also important to point out that the Appalachian Governors submitted a Report to the Congress December 31, 1981, proposing a scaled-back system costing one-third of the remaining costs.

5. **Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?**

Answer: As noted in our response to Question 4, the increased costs in the Appalachian Development Highway System have resulted either from Congressional action or inflation. However, we believe that the "matching" requirements of this program provide considerable incentive not to build excess capacity and, therefore, restrains cost growth.

6. **How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?**

Answer: Within the statutory authorization level for highways, Congress has provided annual appropriations. Based upon those appropriations, the Federal Highway Administration obligates funds on the work components (right-of-way, preliminary engineering, or construction) of individual highway segments. While appropriations are usually fully obligated within the same fiscal year as they are made, disbursements may lag.

7. **How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.**

Answer: The Commission formally provides a status report on its highway system to the Appropriations Committee of both houses of Congress and to the Office of Management and Budget as part of the annual budget submission and appropriation process. Similar information is provided to our respective authorizing committees each time reauthorization is required.

8. **What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?**

Answer: As we understand the provision of S. 2397, it is designed to give the Congress the opportunity to reassess the continuation of any major Federal acquisition, the cost of which, exclusive of inflation, exceeds by 25 percent or more the cost upon which the initial Congressional authorization was based.

The Commission would have no difficulty complying with the reporting requirements of the bill, nor do we believe that its restrictive provisions would ever come into play with respect to our highway system since as earlier noted, the cost growth has resulted either from Congressional action or from inflation.

Annually, as the Commission has proceeded through the budget review process with OMB, it has been our experience that the OMB budget examiners have required of us much of the information called for in S. 2397. It would, therefore, appear logical to lodge the oversight responsibility with that agency. However, again drawing only on our own experience, a quarterly report seems overly frequent; we feel an annual report as part of the normal budget process would result in lower administrative costs and should still meet the basic purpose of S. 2397.

If we can be of further assistance, please let us know.

Sincerely yours,

Francis E. Moravitz
Executive Director

99-849 O - 82 - 9

THE ARCHITECT OF THE CAPITOL
1793

Washington, D.C. 20515

May 25, 1982

The Honorable William V. Roth
Chairman
Committee on Governmental Affairs
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

I have enclosed herewith responses to the questions transmitted in your letter of May 6, 1982, concerning the recent General Accounting Office "Status of Major Acquisitions" report.

I believe you will agree that the various actions and on-going programs that have been adopted by my office, which you will find described in the enclosed answers to your specific questions, evidence our shared concern over the problem of cost growth in major Federal construction projects. Unlike other civilian agencies, which you indicate in your letter lack a regular system for reporting to Congress on the status of their major acquisitions, my office carries out all of its responsibilities and activities relative to major construction projects subject to the direction of cognizant commissions or committees of the Congress, viz., the Senate Office Building Commission with respect to the Construction of an Extension to the Everett McKinley Dirksen Senate Office Building project; the House Office Building Commission on the Modifications to and Enlargement of the Capitol Power Plant project; and the House Office Building Commission, Senate Office Building Commission, and the Joint Committee on the Library with respect to the Library of Congress James Madison Memorial Building project. In addition to the routine direction provided by the Building Commissions, the House Committee on Public Works and Transportation, Senate Committee on Rules and Administration, and the Appropriations Committees, exercise frequent, detailed and effective oversight of all Architect of the Capitol projects.

The proposed bill, as drafted, would place major civil acquisitions, for which the Architect of the Capitol is responsible, under the review authority of the Office of Management and Budget. In my judgment, this would be unnecessarily duplicative of the oversight and direction already provided by the Congress. More importantly, however, to subject a Legislative Branch agency, such as the Architect of the Capitol, to the authority of the Office of Management and Budget, an Executive Branch agency, appears to me to contradict the doctrine of separation of powers. I believe that the latter problem can be avoided by adding a new Sec. 1 (3) to amend S. 2397, as follows:

> Sec. 1 (3) the terms "agency" and "department" as applied to major civil acquisition activities mean any executive department or independent establiishment in the executive branch of the Government, including any wholly-owned Government corporation.

I shall, of course, be pleased to provide any additional information relative to S. 2397, or appear before your Committee, should you deem that desirable.

Cordially,

George M. White, FAIA
Architect of the Capitol

Enclosures

Question: The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

Answer: Cost information is stored and reported on automated data processing equipment. Several programs have been applied to cost data to produce a variety of financial management reports to maintain cost control over major acquisitions. Scheduling information is provided through professional services contracts as major acquisition projects take place. Reports on scheduling are generated and distributed monthly to monitor construction progress. Performance information is provided by both in-house construction management personnel, by associate architect/engineers and project scheduling consultants on major acquisition projects.

Question: Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

Answer: The Office of the Architect of the Capitol central staff maintains data related to major acquisitions, which is provided by the field offices. Because the Architect's construction activities take place in the Capitol Hill complex, central data monitoring is simplified.

Question: How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

Answer: The response to the GAO request for data was provided 3 months after the initial request by the GAO. All of the data requested by the GAO that pertained to Architect of the Capitol projects was provided. As noted in the GAO report, several new information categories were included in the data request. These new requests increased the time necessary to prepare a thorough and accurate response.

Question: The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

Answer: The two projects included in the GAO "Status of Major Acquisitions" report, the Hart Senate Office Building and the James Madison Memorial Library of Congress Building, both experienced cost growth during the course of construction. These increases were not without unreasonable cause. Increases were experienced in the rate of inflation that exceeded cost projections. This situation was reflected throughout the construction industry. The second major factor leading to cost growth is the prerogative of the Congress to determine how it intends to construct and utilize space on Capitol Hill. Both projects experienced funding and design delays while the Congress determined its needs and how to serve them. Programmatic changes affected both the schedule and cost of construction of the two buildings.

Question: Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

Answer: Specific steps have been taken in recognition of the need to improve cost and management control. These actions are summarized as follows:

Detailed allotment structures have been developed both for major construction projects (such as the Hart Senate Office Building) and for internal construction projects. These allotments are used to allocate the budget to specific tasks or phases and to control the expenditure of funds as the project is constructed. These controls have proved to be extremely effective in managing the completion of the Hart project within the approved budget. The accounting system has been modified by providing computer-generated "warning" statements to operating officials when an account reaches the 50% and 80% marks and by instituting computerized procedures to "lock-out" an account that has reached the budgeted allotment. These procedures ensure that cost growth is monitored throughout the construction process.

An internal audit program is being established as an integral part of routine activities. A top priority for the early stages of this program is the review of charges to construction accounts to improve cost management. An internal auditor position was approved in the FY 1982 budget and an auditor will be joining the staff in mid-June, 1982. Audit officials of other government agencies have been consulted to define the scope of the audit program. Further discussions with representatives from the GAO and other Federal audit staffs will take place as this activity is developed.

The fiscal year 1983 budget request has been strongly affected by addressing GAO concerns about cost control and therefore provides necessary staff resources to meet these needs. In that regard, the budget request includes:

- a Project Accountant to set up accounts and oversee charges to construction accounts
- an Accounting Clerk for verifying the reporting of labor charges to construction accounts
- an Inventory Clerk to assist in the control and requisitioning of materials
- permanent positions to which to convert existing temporary employees, currently engaged in construction management functions to provide an ongoing cost control capability.

In addition, the data processing request includes funds for software and hardware that will provide more effective computerized controls in the areas of inventory management and accounting for labor charged to particular projects and activities. Better control over these areas will improve cost growth.

A management structure has been developed that more clearly fixes accountability for project work in the area of new construction, and a similar effort is now underway for in-house construction forces. The main thrust of this management framework for new construction has been to delegate specific authority to project managers and construction superintendents over each particular phase of the construction effort and to hold them accountable for completing the work on schedule and within budget. Positive results are being noted with respect to completion of the Hart Senate Office Building.

Efforts among the Central Office to monitor the construction activities of operating units are being increased. The heightened awareness on the part of central and operating staffs alike has resulted in closer scrutiny of financial management at every level in the organization.

Question: How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?

Answer: Major acquisition projects for the Architect of the Capitol are funded through annual appropriation bills. Funds are appropriated on a "no year" basis, and as such, remain available until expended. Cost projections for the James Madison Building and the Hart Senate Office Building indicate that all funds will be expended for construction.

Question: How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

Answer: The Architect of the Capitol reports directly to several committees and commissions of the Congress about the status of construction projects. The Senate Appropriations Committee receives an annual statement in the Detailed Justifications accompanying the annual appropriations request for all activities under the Architect of the Capitol. The Senate Committee on Rules and Administration holds an annual oversight hearing at which a statement on construction status is provided. The Senate Office Building Commission, under whose direction the Hart Senate Office Building is being constructed, meets when deemed necessary to discuss the status of that project. On the House side, an annual statement accompanies the Detailed Justifications which are published as part of the hearing record. The House Public Works Committee conducts an annual oversight hearing for construction activities under the Architect of the Capitol. The House Office Building Commission meets when deemed necessary to discuss major construction activities affecting that body.

The Joint Committee on the Library and the House and Senate Office Building Commissions monitor progress on the James Madison Memorial Building. In addition, the Architect of the Capitol reports annually to the GAO for the "Status of Major Acquisitions" report. The GAO also performs periodic audits of major construction activities, the results of which are forwarded to the House and Senate Appropriations Committees. The Architect of the Capitol reports expenditures for all activities on a bi-annual basis to the President of the Senate and the Speaker of the House of Representatives pursuant to Sec. 105(b) of Public Law 454, 88th Congress. Other status reports are made from time to time as requested by oversight committees.

Question: What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

Answer: The need for monitoring civil construction cost growth in Executive Branch agencies and departments appears to be met by the legislation proposed in S. 2397. Inasmuch as the Office of the Architect of the Capitol is a Legislative Branch agency, however, S. 2397 does not, in my judgement, apply to this organization's construction. As noted in the response to the previous question, the Architect of the Capitol reports to several Congressional oversight committees and commissions. These committees and commissions provide the oversight review of the activities of the Architect of the Capitol that S. 2397 addresses.

May 28, 1982

Honorable William V. Roth, Jr.
United States Senate
Chairman, Committee on
Governmental Affairs
Washington, D.C. 20510

Dear Senator Roth:

Thank you for your letter of May 6, 1982 regarding S. 2397, the Cost Reduction in Major Procurements Act, and the accompanying questions on the management of major acquisitions by federal agencies.

CORPORATION FOR PUBLIC BROADCASTING

Edward J. Pfister
President

As the president of a private non-profit corporation, I am very concerned about proper management and financial control of our significant projects, especially in this time of fiscal austerity. As a taxpayer, I am personally concerned about the proper management of major federal projects.

However, because the intent of S. 2397 is aimed at "...construction, acquisition, or procurement financed in whole or in part with Federal funds..." it would appear to be inappropriate for CPB to comment on it or respond to questions about its principles. As you know, CPB is a private, nongovernmental corporation, chartered under the laws of the District of Columbia, which seeks to carry out the objectives of the Public Broadcasting Act of 1967, as amended. As such, the money used by the Corporation for its acquisitions are not federal funds. Because of CPB's unique status and its role as insulator for the recipients of its money, this particular means of investigating CPB's management controls is probably inappropriate.

That is not to say that CPB is immune from Congressional oversight on the management of its resources for the benefit of the American people. In fact, the Corporation's operations often receive closer scrutiny by Congress than some Federal agencies. The Public Broadcasting Act requires that CPB submit an annual report to Congress that includes "... a comprehensive and detailed report of the Corporation's operations,

activities, financial condition and accomplishments..." Furthermore, the Act requires that "...the officers and directors of the Corporation shall be available to testify before appropriate committees of the Congress with respect to such report, the report of any audit made by the Controller General..., or any other matter which such committees may determine." [47 U.S.C. 396(i)(1) and (2)]

The Act requires the accounts of the Corporation to be audited annually and a report of that audit sent to Congress in the annual report. In addition, the financial transactions of the Corporation, and each of its recipients may be audited at any time by the General Accounting Office. [47 U.S.C. 396 (l)(1)(A) and (l)(2)(A)]

Finally, the Corporation's activities are routinely reported on to Congress during frequent oversight hearings each year and during special hearings conducted by the authorization committees and appropriation committees which have jurisdiction over CPB.

We feel that the information you have requested in the context of S. 2397 is more properly obtained through the above-enumerated methods which do not raise the question of CPB's non-governmental status.

CPB would be happy to assist you in any way it can, and in the appropriate forum, to obtain information on the management of its activities. If I can be of any further assistance to you, please do not hesitate to call on me.

Sincerely,

Edward J. Pfister

Department of Energy
Washington, D.C. 20585

MAY 2 7 1982

Honorable William V. Roth, Jr.
Chairman, Committee on
Governmental Affairs
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

In response to your letter of May 6, 1982, concerning management oversight of major Federal projects by civilian agencies, the following information is provided for the Department of Energy in terms of the specific questions asked by the Committee:

"1.) The General Accounting Office had some difficulty in preparing its recent report 'Status of Major Acquisitions as of September 30, 1981' because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?"

RESPONSE: The Department of Energy has an established Project Management System which includes monthly reporting of cost, schedule and technical performance on all projects designated as Major System Acquisitions or Major Projects. Information taken from these reports is stored in an automated data base by individual project. A Summary Monthly Report is provided to Senior Management on all Major System Acquisitions and Major Projects. Data on all projects are published in quarterly project status reports and the system is accessible on an exception basis as required by management. An annual Budget/Cost Variance Analysis Report is used to obtain most of the information requested by GAO; however, the annual GAO report usually requires additional input by program offices and field organizations on individual projects, particularly on smaller projects.

"2.) Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?"

RESPONSE: The Department maintains a central source of data related to major acquisitions, although more detailed data are maintained at program offices and field offices. The DOE Project Management Reporting System not only provides for standardized reporting to Headquarters in a summary fashion, but also contains optional reports which may be requested by intermediate levels of management. In addition, a central repository of Mission Need Statements, Project Plans and Project Charters is maintained at Headquarters.

"3.) How many months after the initial GAO request for data to be used in the 'Status of Major Acquisitions' report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?"

RESPONSE: The GAO requested data on projects covering the period through September 30, 1981 to be reported by November 1, 1981. Although this was considered an extremely tight deadline, the Department of Energy response was completed and forwarded to Mr. James Duffus on November 2, 1981. All data requested by GAO was provided in accordance with the GAO instructions.

"4.) The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?"

RESPONSE: While the Department fared well in comparison with other agencies having significant acquisition activity (fourth best against initial Congressional budget estimates and best against approved baselines), the cost growth is considered excessive. It is recognized that inflation has been the single factor most responsible for cost growth in recent years. Program instability resulting from inconsistent funding is another major cause of cost growth, not just because of schedule impacts, but through the loss of project momentum when major replanning must be accomplished. The Federal budget process may also be responsible for some low initial cost estimates which ultimately result in apparent cost growth for all agencies. The desire to fit new programs within real or perceived funding limitations often creates downward pressures on initial estimates, which is one reason why initial estimates make poor baselines for measuring managerial performance.

"5.) Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years?" What are these actions and how well have they been implemented?"

RESPONSE: The development and implementation of formal, standard project management policies and procedures, including: top level management emphasis, establishment and control of realistic project baselines, formulation of acquisition strategies, development of advance acquisition and assistance plans, periodic project reviews coupled with independent cost estimates and assessments of project performance, and project management training programs are all contributing to improved performance. The Department of Energy was formed by combining elements of various agencies, each of which had its own management systems and techniques. The Department's various field organizations are now starting to fully accept and utilize a single, standard system in lieu of the variety of systems which existed when the Department was established. Use of management

techniques such as the Cost/Schedule Control Systems Criteria and Uniform Reporting Systems provide managers with better information on which to base management decisions and provide excellent visibility of cost and schedule performance trends to all levels of management. Implementation on new projects has been excellent. Application to on-going projects has been limited.

"6.) How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?"

RESPONSE: Department of Energy projects are funded mainly through annual appropriations which may be spent in the year of appropriation and later years. It is felt that full funding, rather than incremental annual funding, would help to curb cost growth by contributing to greater program/project stability and improved adherence to long range financial plans.

"7.) How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports."

RESPONSE: The Department of Energy reports the status of major acquisitions to the GAO annually via the Financial Status of Major Federal Acquisitions report. Additionally, the Department reports on Major System Acquisitions to the Office of Management and Budget by Form 55 in the Annual Budget Submission. The Department notifies the Congress whenever a project involving construction exceeds the estimated cost set forth for the project by 25 percent. Other notification occurs during the budget process through Congressional Project Data Sheets (separate for Plant and Capital Equipment and Operating Fund Projects), Congressional testimony by Department officials, and in response to Congressional inquiries.

"8.) What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?"

RESPONSE: By a separate letter of April 27, 1982, you had requested our views on S. 2397. The bill is undergoing review in the Department. When we receive Administration clearance, we will be pleased to provide you with our comments.

Sincerely,

William S. Heffelfinger

William S. Heffelfinger
Assistant Secretary
Management and Administration

cc: Honorable Thomas F. Eagleton
United States Senate

ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

COMPTROLLER

10 JUL 1982

Honorable William V. Roth, Jr.
Chairman, Committee on
Governmental Affairs
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

I have been requested by the Secretary of Defense to respond to your letter of May 6 in which you ask eight questions relating to Senate Bill S2397. Although the answers to the eight questions appear in the enclosure to this letter, there is one specific and several general comments regarding major systems acquisition that I would like to make.

First, although we understand that the legislation is not intended to apply to the Department of Defense, this is not clearly indicated in the bill. We strongly recommend that the definition "major civil acquisition" be revised to explicitly exclude acquisitions funded by DoD appropriations. In view of this, the Secretary has requested that the Department of the Army respond directly on matters affecting civil works.

As noted in your letter, the Department of Defense is providing quarterly reports to the Congress on the status of major systems acquisitions. We are also providing various congressional committees 15 other reports relating to the status of major systems acquisitions; these reports are identified in the response to question 7. DoD was also the source of information for the recent GAO report, which was changed from a financial status report to a systems status report with the latest submission (April 22, 1982). This GAO Report, "Status of Major Acquisitions As Of September 30, 1981: Better Reporting Essential to Cost Growth," raises the total to 16.

Experience to date with our quarterly Selected Acquisition Reports has indicated that nearly all of the changes in programs occur concurrent with our annual budget submission. Few, if any, changes take place during the other three calendar year quarters, yet an extraordinary amount of time is devoted to the preparation of these reports. With the advent of the Nunn Unit Cost and Unit Cost Exception Reports, we believe that the Congress would be better served if only the set of Selected Acquisition Reports, which support the annual budget, were prepared and submitted. Should any of the programs breach an established threshold, regardless of when it occurred, an exception report would pick it up. Not only would a reporting system of this nature save time and money, it would also focus attention on the systems which were experiencing problems. Therefore, I encourage you to give consideration to establishing one annual report supported by exception reports.

Although the Office of Management and Budget might most appropriately serve the functions outlined for it in S2397, the active involvement of the various congressional oversight committees in making their unique needs known cannot be overemphasized. Perfect uniformity among the Agency reporting systems may not be necessary nor desirable. Each Federal Agency has different kinds of acquisition problems and the purpose of any reporting system should be to provide the status of major system acquisitions to the appropriate congressional committees. It is essential that these efforts be responsive to the informational needs of the appropriate congressional committee.

The Office of Management and Budget advises that from the standpoint of the Administration's program, there is no objection to the presentation of this report for the consideration of the Congress.

Sincerely,

Jack R. Borsting

Jack R. Borsting
Assistant Secretary of Defense

Enclosure

Responses to Questions
Submitted by Senator Roth
Chairman, Committee on Governmental Affairs
United States Senate
May 6, 1982

Question 1:

The General Accounting office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

Comment:

The information concerning cost, scheduling, and performance of major acquisitions are provided in the following documents which are made available to the Congress: Research and Development Descriptive Summaries (acquisitions in RDT&E), Congressional Data Sheets (acquisitions in Procurement), and Selected Acquisition Reports (major system acquisitions which have been designated by and approved for full scale development by the Secretary or Deputy Secretary of Defense).

Question 2:

Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

Comment:

The Department of Defense maintains central sources of data on all acquisitions which appear as line items in the budget. It should be noted, however, that much of the detailed information requested by the GAO is centrally available on major systems which have entered full scale development only - systems which represent 75% of the dollar value included in the GAO report. Details on the other 25% must be obtained from the Military Departments.

Question 3:

How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

Comment:

The question is misleading in that the GAO requested the data on August 14, 1982, with an "as of" date of September 30. DoD's response was signed out on December 14, 1982 which was 2 1/2 months after the "as of date."

DoD was not able to reply to GAO's request for data in its entirety. Problems were encountered in the following areas:

a. Providing the Planning Estimate. It is not feasible to start reporting concurrent with the development of a planning estimate for most major systems acquisitions. Most systems are concepts at this stage; there are very few whose characteristics are well enough defined to permit the establishment of baseline estimates for reporting procedures. Therefore, DoD does not establish baselines until the full scale development decision when critical parameters can be established.

b. Variance Analyses. These analyses are available only on those systems which have been designated major by the Secretary or Deputy Secretary of Defense and approved for full scale development.

Question 4:

The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced.

Comment:

We in DoD, while we are concerned about cost growth and are taking steps to reduce the costs of acquisition, do not consider it excessive when all facts are considered. Unanticipated economic changes, priced out over the average 15 year development and production cycle, and program instability, particularly quantity changes, account for the most cost growth in the DoD.

Question 5:

Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

Comment:

Yes, the Deputy Secretary of Defense approved seven initiatives (Budget to Most Likely Cost, Budget Funds for Technological Risk, Budget for Inflation, Forecast Business Base, Assure Appropriate Contract Type, Improve the Source Selection Process, and Design to Cost Contract Incentives) on April 30, 1981, which, when fully implemented, should result in reducing program cost growth.

It is too early to determine the overall impact, but the FY 1983 defense budget and its five year program are now based more directly on economic events affecting those industries actually providing goods and services to the military. Acquisition programs will budget to most likely cost; thus the Congress and others can see in advance that the likely, fully funded costs will be based on appropriate inflation expectations for several years in the future. The inflation assumptions for major procurement commodities (ships, aircraft, missiles, and tracked vehicles) in the FY 1983 budget average about two percentage points higher than the GNP average.

Question 6:

How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions spent in later years as well?

Comment:

DoD's major acquisition programs are funded through annual appropriations acts that provide funds that are available for obligation and expenditure in subsequent years as well. Major acquisitions are budgeted on the basis of a full funding concept which provides that all funds to complete the items are requested when funds are first requested for the item. Therefore, it is normally not necessary to return annually to request additional funds to complete items which have already been provided by the Congress.

Question 7:

How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

Comment:

The Department of Defense submits the following reports relating to the status of its major acquisitions:

Report	Frequency	Congressional Recipient
Selected Acquisition	Quarterly	President of the Senate Speaker of the House Armed Services Committees Appropriations Committees Budget Committees Government Operations-House Congressional Budget Office
Research and Development Descriptive Summaries	Annually	Armed Services Committees Appropriations Committees Budget Committees Congressional Budget Office
Congressional Data Sheets	Annually	Armed Services Committees Appropriations Committees
Contract Award	Bimonthly	President of the Senate Speaker of the House
Cost Variations in Military Construction	Annually	President of the Senate Speaker of the House

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Long Range Security Program	Semiannually	Military Construction Committees
Appropriation Status by Fiscal Year Program Subaccounts (DD 1002)	Monthly	Congressional Budget Office
Status of Funds	Semiannually	Senate Armed Services Committee
Unit Cost Exception	Exception Basis	President of the Senate Speaker of the House Armed Services Committees
Unit Cost Certifications	Exception Basis	President of the Senate Speaker of the House Armed Services Committees
Budget Execution (DD Form 1176)	Quarterly Monthly	House Appropriations Committee Congressional Budget Office
Base for Reprogramming (DD 1414)	Annually	Armed Services Committees Appropriations Committees
Reprogramming Action (DD 1415)	As Required	Armed Services Committees Appropriations Committees
Programs (DD 1416)	Semiannually	Armed Services Committees Appropriations Committees
Special on New Program Starts (DD1416-1)	Quarterly	Armed Services Committees Appropriations Committees

Question 8:

What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

Comment:

The oversight committees, not OMB, should specify what is wanted in a reporting system. It is most probable that the different oversight committees will require different information.

Additional comments appear below:

The bill as prepared requires both a quarterly report and an exception report very similar to the DoD SAR and Unit Cost Exception reports. The Congress would be better served with a yearly report similar to the SAR, but less complex, and with elimination of the quarterly reports. The exception reports during the year should satisfy and take the place of quarterly reports.

The idea of excluding the impact of unanticipated inflation from calculations relating to threshold breaches is desirable. This technique results in essentially a constant dollar analysis which is a better indicator of how well or how poorly management is doing.

The Secretaries of the Executive Departments/Agencies and their responsible Project Managers - not OMB - should be held responsible and accountable for cost growth.

The report requires authorized, appropriated, and obligated funds to be reported. The Congress would be best served by limiting the report to appropriated funds.

The report should focus on "the development or baseline estimate" - which best represents the well-defined system rather than the "initial or planning estimate" which represents only a concept.

The report requires an index of testimony which has just been dropped as a requirement from our Unit Cost Exception Reports - dropping this requirement is recommended to avoid too much information that may not be needed.

The proposed bill requires that "no additional funds may be obligated and expended" if a 25% breach occurs. The use of the word "expended" could prevent paying a contractor what he is entitled to for work already done thereby creating a legal problem. Thus, it is recommended that the term "expended" be dropped and just the term "obligated" be kept which is the current legislative language under which the Unit Cost Exception Reports are operated.

There is no distinction between unit costs and program costs and between annual (current) procurement and total program acquisition costs.

The bill does not specify as to when a report is to be submitted after a threshold is breached.

THE SECRETARY OF HEALTH AND HUMAN SERVICES
WASHINGTON, D.C. 20201

The Honorable William V. Roth, Jr.
Chairman
Committee on Governmental Affairs
United States Senate
Washington, D.C. 20510

NOV 2 1982

Dear Mr. Chairman:

Enclosed is our reply to your request for information on this Department's monitoring of major acquisition projects and our views on S. 2397, the Cost Reduction in Major Procurements Act. Specifically, you asked us to respond to several concerns related to a recent General Accounting Office (GAO) report on Executive Branch agency oversight of major acquisitions.

The April 22, 1982 GAO report included data on three projects of this Department in excess of $50 million: the Social Security Administration's telecommunications systems acquisition, and two Public Health Service construction projects which have been virtually completed. Procurements of this magnitude are relatively few for this Department, as the GAO report indicates. Nonetheless, we share your concern that major projects of the Federal government require prudent financial management to avoid unanticipated cost growth. In fact, all three of HHS projects mentioned in the GAO report received considerable Congressional attention through the appropriations process and by other concerned committees of the Congress and have been closely monitored by this Department in an effort to maintain close accountability for appropriated resources.

We appreciate the opportunity to provide your Committee further information on this subject and to respond to the issues related to the GAO report.

We are advised by the Office of Management and Budget that there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely,

Secretary

Enclosure

HHS RESPONSES TO QUESTIONS ON MAJOR ACQUISITIONS

Question

The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

Response

In 1979, we implemented OMB Circular No. A-109 by issuing this Department's policies and procedures for major systems acquisitions. The policy established oversight responsibility for major systems acquisitions in the Office of the Secretary. The HHS projects cited in the GAO report are monitored by the Office of the Assistant Secretary for Management and Budget (ASMB) within the Office of the Secretary. Information concerning cost, scheduling, and performance of major acquisitions are maintained along functional lines within ASMB and the Operating Divisions of the Department.

Question

Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

Response

We have not maintained a central source of data relating to major acquisitions since HHS has had few of these projects. Two of the three major acquisitions cited in the GAO report are construction projects which are virtually complete. The remaining project, the Social Security Administration Data Acquisition and Response (SSADAR) telecommunications systems, has continual high level review within the Department. We anticipate few new major acquisitions in the near future.

The Social Security Administration (SSA) has a central source of data related to major ADP systems acquisitions in their Office of Systems Planning and Control. The Office of Facilities Engineering (OFE), a division of ASMB, maintains data on major construction projects.

Question

How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

Response

The original GAO request was made in August, 1981 and was for the status of major acquisitions as of September 30, 1981. Our October 28, 1981 response to GAO was timely considering the September 30 date. The Department was able to supply all of the requested data to GAO.

Question

The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

Response

Three HHS projects were listed in the GAO report. The information on cost growth for each project is given below:

- The Ambulatory Care Research Facility had no cost growth.

- The National Environmental Health Sciences Center in North Carolina experienced a 7% increase. However, we do not consider the cost growth to be excessive since it is normal on a construction project to retain approximately 10% as a contingency during construction.

- The cost data in the GAO report on the SSADARS Telecommunications acquisition project were misleading because GAO compared a three year cost estimate for the system to a more recent estimate covering a ten year period. The cost of $106.8M associated with the current estimate is the systems cost for the 10 year period of FY 1981 through FY 1990. This cost includes all equipment lease/purchase and maintenance, facilities preparations, software, and consultant services required for the 10 year period. However, the baseline estimate of $56.6M to which the current estimate was compared only consists of the cost for the three year period of FY 1979 through FY 1981. Therefore, the basic reason for the cost discrepancy between the data contained in the GAO findings as reported to Congress is the number of years that were used in computing the estimates.

Question

Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

Response

The Office of Facilities Engineering (ASMB) has initiated the development of the prototype of an internal tracking system which will be designed to identify increases in the initial cost and time to complete construction acquisitions. The Social Security Administration is developing a more effective estimating capability by conducting marketing surveys prior to formulating planning estimates. These systems are under development and have not yet been implemented.

Question

How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?

Response

The funding for the Department's major acquisitions varies with the project. For example, construction project funding for Public Health Services facilities are normally "no year" funds. The design funds for such projects are normally appropriated first followed by construction funding once the design phase is completed.

The Social Security Administration's major acquisitions of data processing equipment are funded through the Limitation on Administrative Expenses (LAE) which is an annual appropriation. Budget controls within SSA, the Department of Health and Human Services, and the Office of Management and Budget determine the specific funding level for individual acquisitions. Typically, the LAE is not a "no-year" appropriation; that is, SSA is unable to carry over unobligated funds from one fiscal year to the next. However, language contained in the Supplemental Appropriations Act for FY 1982, P.L. 97-257, authorizes unobligated balances in the ADP and Telecommunications portion of the LAE for FY 1982 to be carried over to subsequent fiscal years, until expended. This language, as approved by the Congress, is designed to provide SSA with the fiscal flexibility it needs to implement its Systems Modernization Plan.

Question

How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

Response

The Department informs Congress on the status of major acquisition projects through appropriations hearings and any special hearings that may be convened as well as the Department's annual appropriation request to Congress.

Question

What are your veiws on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

Response

The bill would require that the Office of Management and Budget (OMB) monitor all major civil acquisitions and report to the Congress any instances where the actual cost or estimated projected costs of the acquisition has resulted or will result in a cost overrun of 25 percent. Upon notification of the Congress by OMB, the agency would suspend funding of the acquisitions until Congress enacts legislation specifically authorizing its continuation for a period not to exceed one year.

We oppose the bill since we believe that suspension of funding of the acquistion until Congress enacts legislation will result in excessive delays in obtaining necessary systems for the Government. Further, the requirement to stop work, the contractor's down time, and the eventual start-up costs will result in additional cost growth. We also believe that the reporting requirements would be excessive and unduly burdensome.

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

JUL 12 1982

Honorable William V. Roth, Jr.
Chairman
Committee on Governmental Affairs
United States Senate
Washington, D. C. 20510

Dear Chairman Roth:

We are pleased to respond to your May 6 letter wherein you requested information on cost growth of major acquisition projects and our comments on S. 2397.

The answers to your questions are provided in the enclosure to this letter. We feel compelled, however, to respond to the comment in the third paragraph of your letter about civilian agencies not having a regular reporting system to the Congress on major acquisitions. The bulk of the major acquisitions in the Department of the Interior are made by the Bureau of Reclamation. For many years Reclamation has reported to the Congress annually through the budget process on all of its major projects, the changes to the estimated costs and completion schedules, and identified the reasons for such changes. Following the General Accounting Office report in 1975 and follow-up report in 1978 on cost estimating and indexing, and the 1978 report on cost growth, numerous changes were made in Reclamation's procedures and reporting practices. GAO and the Office of Management and Budget have endorsed those changes and the new practices and procedures. While some agencies may not have established reporting procedures, Reclamation does have a management control system and a regular reporting system to the Congress in regard to its major acquisition projects.

We would also like to advise you that we feel the GAO definition of major acquisition projects is not, and should not be, applicable to National Park Service projects. The Park Service has had only two projects, Cumberland Gap Tunnel and Natchez Trace Parkway, which we feel might qualify as major acquisition projects. Virtually all other Park Service construction projects are relatively small, separable projects which are fully funded in a single fiscal year. We have been attempting to convince GAO that the major acquisition report should not apply to the Park Service. We have been partially successful in that the Park Service report to GAO has been reduced from about 60 pages to about 10 pages. While we have a difference of opinion with GAO on the applicability of the report, the Park Service has annually submitted its report to the GAO in a timely manner.

The Office of Management and Budget has advised that there is no objection to the presentation of this report from the standpoint of the Administration's program.

If you require further information, please contact us.

Sincerely,

J. Robinson West
Assistant SECRETARY

Enclosure

RESPONSES TO QUESTIONS FROM CHAIRMAN WILLIAM V. ROTH, JR.

1. QUESTION: The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

   ANSWER: The Bureau of Reclamation maintains its central computer system at its Engineering and Research Center in Denver, Colorado, where data is stored and catalogued by region, category of construction, and project. Each of the seven regional offices provides the input to the system for the projects located in their region.

   The National Park Service construction program is guided by a multiyear development and design process. All planning and construction activities, including cost estimates, are scheduled, stored and catalogued by project in the Multiyear Program Formulation computer file. After major construction is accomplished, the actual development costs are entered into the Financial Capital Acquisition Inventory System.

2. QUESTION: Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

   ANSWER: Reclamation maintains its central file in Denver, Colorado, where information on all major acquisitions is stored. This information is readily available to the Washington headquarters and regional offices through established reporting procedures.

   The Park Service's Multiyear Program Formulation Schedule, consolidated in headquarters, provides in one document all of the special studies, planning and development projects for proposed work for completion of development in the National Park System. This report shows what is scheduled for the next five years and beyond and is distributed to each regional office.

3. QUESTION: How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

   ANSWER: GAO's request was dated August 14, 1981, and asked for responses by November 1. The Park Service provided all applicable data to the GAO by the requested date while the Bureau of Reclamation submitted all applicable data two weeks afterwards.

4. QUESTION: The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

ANSWER: Reclamation does not consider the cost growth of its projects to be excessive. Project costs are controlled by appropriation ceilings established by individual project authorizations. Appropriation requests and work performed are limited by the authorizing legislation which provide for application of engineering cost indexes to accommodate inflation. In addition to inflation-caused growth, additional costs arise from project reformulation and design changes brought about by environmental considerations, changing needs of society, and the technological changes which frequently occur when progressing from the planning stage to actual construction.

The capital improvement projects which the National Park Service accomplishes have not experienced unusually excessive cost increases. Road, bridge and facility construction has increased at a rate which corresponds to the general rate of inflation experienced in the nation as a whole.

5. QUESTION: Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

ANSWER: The Bureau of Reclamation continually strives to properly fund its projects so that its program is as aggressive an engineering program as possible in order to get the projects completed and producing benefits. The Bureau has developed a proposal for expediting and shortening the time required for planning water resources projects from approximately 17 years to 7 years.

Generally, Park Service construction projects are initiated and completed in one year with few, if any, changes to the original plan. Therefore, the Park Service usually only considers the cost of inflation which is included in the budget estimates submitted to the Congress.

6. QUESTION: How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?

ANSWER: All Park Service and Reclamation construction projects are funded through annual appropriations bills which provide "no-year" authority. That is, the budget authority remains available for obligation for an indefinite period of time, usually until the objectives of the authorizing legislation are attained. Generally, all funds appropriated for a given fiscal year are obligated during that year unless some unanticipated condition develops in the

period from the time the funds are requested to the time contracts are awarded. For the most part, outlays occur in the year for which the funds are appropriated; however, they also occur to a limited extent in later fiscal years. The fiscal year in which outlays will occur is dependent upon when in a fiscal year contracts are awarded and the time needed to complete the work.

7. **QUESTION:** How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

ANSWER: On an annual basis, the Bureau of Reclamation and the National Park Service inform the Congress through their budget documentation and presentation for those projects for which funds are requested. The budget justifications provide specific cost and completion data by project. Reclamation budgets are submitted to the House and Senate Appropriations Subcommittees on Energy and Water. Park Service budgets are submitted to the Subcommittees on Interior and Related Agencies. In addition, capability statements, fact sheets and other materials are prepared in response to Congressional requests. These materials address any questions raised including project cost data.

The Bureau of Reclamation annually provides a Consolidated Reclamation Project Cost Report and summary statement to the Senate Energy and Natural Resources and House Interior and Insular Affairs Committees and the appropriations subcommittees mentioned above. In addition, the Bureau submits an extensive annual report which covers a broad range of activities to these committees and to each member of the Congressional delegations from the seventeen western States where the Bureau performs its work.

Reclamation has instituted a management control system for flagging projects which are approaching cost-ceiling problems. The system is defined in Reclamation Instructions and internal reports are prepared semiannually. Projects with cost ceiling problems are identified and management action is initiated to correct the problem and/or to inform the Congress. Congress is informed either through the annual appropriations process or by special reports when needed.

8. **QUESTION:** What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

ANSWER: If enacted, this bill will have little, if any, applicability to the National Park Service because of the $50 million limitation. Even if it does affect future acquisitions, we feel the Office of Management and Budget already has the oversight authority it needs through its review and approval of annual budget submissions.

This bill would be applicable to the Bureau of Reclamation; however, we do not feel the bill provides any significant benefits beyond those already being realized through existing procedures. We feel the annual budget process, annual reports, and other reports adequately respond to the Administration's and Congress' needs on the cost condition of Reclamation projects. From our experience, this bill would add an unnecessary administrative layer to the

reporting process. If there are other civilian agencies that do not currently have a management overview and reporting system established, it seems more appropriate to establish them in those agencies than to legislate an administrative function already instituted in agencies which have them. It appears that some joint efforts between the civilian agencies and GAO through the existing system of its major acquisitions reporting could better accomplish the intent of this bill.

The following Reclamation comments address specific sections of the bill:

Section 1 (2)(a) and (b) - As our reporting system has been adjusted and refined, we have agreed with OMB and the appropriations subcommittees that estimated project costs and indexed appropriation ceilings and related cost figures would be reported as of October 1 of each year to correspond with the Federal government's fiscal year. Use of the January 1 date is inconsistent with the above and, if not changed, all project costs and appropriations figures would have to be adjusted. We do not feel this time consuming exercise would provide tangible benefits.

Section 2(b) - The cost variances in DOD weapons and related acquisitions can be much more sudden and erratic than for Reclamation acquisitions. Therefore, requiring the reporting on a quarterly basis would be burdensome and repetitious because the costs do not change that rapidly. It is our belief that annual reporting is sufficient to identify variances in civilian major acquisition projects.

The information requested in Items 1 through 10 of Section 2(b) is provided in our standard budget documentation submitted to OMB and Congress. In addition, our management overview system already requires special notification to the authorizing and appropriations committees when problems develop. In regard to Item (9), the major cause of cost growth from the initial estimate is inflation. That cause is provided for in the authorizing legislation for Reclamation projects. Therefore, it should be excluded from this bill, otherwise it may negate the proviso for indexing contained in the authorizing legislation.

Section 2(c) - OMB has been involved in providing guidance on treatment of inflation for budget year development and outyear requirements. This section seems to imply a technical involvement by OMB regarding procedures that may not be warranted. In our case, it would duplicate the effort of Reclamation in developing practices and procedures for cost estimating and indexing which have been reviewed and concurred in by OMB and GAO.

Section 3(a) - As mentioned above, the cost growth of 25 percent above the initial estimate should exclude the portion related to inflation. In addition, a management system to notify the Congress is already in operation. We feel to have OMB make the notification is redundant, burdensome, and nonproductive.

Section 3(b) and (c) - The impact of these sections is to override the escalation proviso of most authorizing legislation that permits indexing the appropriation ceiling. To require additional legislation or joint resolution could have the

opposite effect of what this bill is trying to do. For example, if legislation would be required and is not enacted in a timely manner, and assuming the project is allowed to continue, funds would not be available. This would cause disruption of work with many ramifications that may result in increased costs and schedule delays.

The proposed legislation or joint resolution would be in effect for only one year. Thus, each year another Congressional action would be required in most instances to reconsider the same cause of cost growth for projects still underway. This seems contrary to what the Congress accomplished by including escalation provisions in authorizing legislation for Reclamation projects.

U.S. Department of Justice
Office of Legislative Affairs

Office of the Assistant Attorney General

Washington, D.C. 20530

NOV 12 1982

Honorable William V. Roth, Jr.
Chairman, Committee on Governmental
Affairs
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This is in response to your request for the views of the Department of Justice with regard to S. 2397, a bill "to require (1) the enactment of special legislation to continue the expenditure or obligation of funds on any major civil acquisition initiated after January 1, 1982, whenever the cost of such acquisition has increased or, on the basis of estimates, will increase over the initial estimate when the project was justified to the Congress by 25 per centum or more, and (2) reporting of status information on all major civil acquisitions".

The Department of Justice, while recognizing the validity of concerns over escalation of costs associated with major construction or procurement contracts, opposes enactment of S. 2397. The bill would establish new and cumbersome reporting requirements, duplicative of existing Department of Justice reporting procedures. Furthermore, Sections 3(b) and (c) of S. 2397 create serious legal and policy questions effecting the entire government.

1. Reporting Requirements

S. 2397 represents an attempt to create a mechanism for the monitoring and controlling of significant increases in costs associated with "major civil acquisitions". For purposes of the bill, "major civil acquisitions" are defined as any construction, acquisition, or procurement financed in whole or in part with federal funds, the costs of which exceed $50 million. Sections 1, 2 and 3(a) of S. 2397 place on the Office of Management and Budget ("OMB") the responsibility for gathering from the heads of agencies and departments statistics on all major civil acquisitions. This information includes data showing increases in costs, changes in scope, and differences in completion dates that have occurred over the life of the affected contracts. In addition, OMB is charged with the duty of promptly notifying Congress whenever it is determined that the actual or estimated costs of a major civil acquisition will result in a cost growth of 25 percent or more over the initial cost estimates.

It is an exception when any component of the Department of Justice has a major procurement action which meets the threshold of $50 million as a major civil acquisition. When such major procurements do arise, they are funded through the congressional appropriations process. Congress is informed about the status of these procurements by a schedule included in the formal budget which shows the amount appropriated, obligations to date, planned completion date and the project status. If faced with the possibility of a cost overrun which cannot be completely offset by cost savings measures, we would request either supplemental appropriations or a reprogramming of funds. In either situation, Congress would receive supporting documentation notifying them of a cost overrun. Congress is thereby fully informed of cost increases associated with major construction or procurement contracts related to the Department.

2. Stay of Spending Authority

In the second portion of S. 2397, Sections 3(b) and (c) of the bill require that whenever the Director of the Office of Management and Budget ("OMB") notifies Congress of a cost growth of 25 percent on a major civil acquisition, all authority to obligate or expend additional funds on that contract immediately ceases unless Congress passes specific legislation authorizing the expending and obligating of funds for the contract. Moreover, under S. 2397, the special legislation reauthorizing the expenditure of funds may only do so for a period not to exceed one year.

We believe that serious legal and policy questions are created by Sections 3(b) and (c) of S. 2397. As noted, those provisions of the proposal provide for the automatic staying of authority to obligate or expend funds whenever OMB notifies Congress that the actual costs or estimated projected costs of the acquisition--excluding inflation--exceeds 25 percent. The stay of authority to expand funds remains in effect under the legislation until Congress passes a bill or joint resolution once more allowing funds to be obligated or expended. We believe that these provisions, if applied to a continuing contract, would create unwarranted additional Government liability, increase litigation, and, in general, would fail to accomplish the intended goal of minimizing runaway costs associated with major construction or procurement contracts.

Once a contract has been formed between a Government agency or department and a Government contractor, following authorization and appropriation of funds as required by law, a complete and legally binding obligation exists between the parties. That obligation includes, on the one hand, the requirement that the contractor --subject to the termination clauses of the contract--fully

perform the agreed-to work, and, on the other hand, the requirement that the Government not interfere with contract performance or payment due under the contract. Any such breach of obligation by the Government may result in a breach of contract action before the agency's contract appeals board or in the Court of Claims under the Contract Disputes Act of 1978, 41 U.S.C. §607 (1976 Supp. III).

S. 2397's requirement that authority to expend or obligate money for a given contract be automatically stayed when Congress is notified that the originally estimated costs have increased or will increase by 25 percent means that, once triggered, all further work on the contract must cease since any additional performance would require the obligation of additional funds to pay for that performance. This suspension of work will continue until Congress passes a bill or joint resolution allowing the continuation of expenditure authority. Not only does the work suspension required by operation of S. 2397 significantly disrupt a contractor's performance, but it also creates potential liability on the part of the Government for the costs incurred by the contractor as a result of the interference in contract performance.

Since, by definition, the Government would be under a binding contractual obligation to allow performance to proceed without interference, Lewis-Nicholson Inc. v. United States, 213 Ct. Cl. 192, 550 F.2d 26 (1977); George A Fuller Co. v. United States, 108 Ct. Cl. 20, 94, 69 F. Supp. 409, 411 (1947), any work suspension or other disruption in the contractor's ability to perform would generate a valid claim against the United States. To the extent the contract had a suspension of work clause 1/, any work suspension occasioned by the operation of Sections 3(b) and (c) of S. 2397 would require an equitable adjustment for the delay costs incurred by the contractor while waiting for Congress to pass the necessary special legislation allowing the obligation of funds to continue. See, C.H. Leavell & Co. v. United States, 208 Ct. Cl. 776, 530 F. 2d 878 (1976). Such delay costs might well be extremely high in view of the heavy shut-down and start-up expenses common to the types of major construction or procurement contracts covered by this bill.

More importantly, where a contract does not have a suspension of work clause, the shut down of operations pending Congressional action, if of any significant length of time, would in all likelihood be deemed a total breach of contract which would allow the

1/ Most major construction contracts incorporate a suspension of work clause which allows the Government to order the temporary suspension of contract performance, but requires the payment of an equitable adjustment for unreasonable delay costs thereby incurred. See, e.g. 41 C.F.R. 1-7.602-32.

contractor to declare the contract at an end and recover common law damages--including anticipated profits. See e.g., Northern Helix Co. v. United States, 207 Ct. Cl. 862, 524 F.2d 707 (1975).

The likelihood that any suspension of work required by operation of this proposed legislation would be protracted in length and, therefore, seriously interfere with contract performance is enhanced by the fact that no resumption of authority to obligate or expend funds may occur prior to the passage of a bill or joint resolution by both houses of Congress. Even assuming such an automatic suspension does not occur during a Congressional recess, significant time will be required during the course of the necessary legislative process. It can be fully anticipated that the delays inherent in the legislative system will result in extremely high delay costs being passed on to the United States either through breach actions or as equitable adjustments. 2/ Moreover, under this legislation any bill or joint resolution authorizing a continuation of authority to spend or obligate funds under a contract may do so for only a one year period. Section 3(c)(2). This insures that once the "trip-wire" has been triggered there will be significant delays each subsequent year resulting in ever increasing delay costs being chargeable to the Government. 3/

In addition to the delay costs that would be sustained during the period required for Congress to pass legislation allowing authority to expend and obligate funds to continue, Congress could effectively terminate a major contract either through an explicit vote against continuing the authority to obligate funds or passively through inaction. To the extent such Congressional action or inaction was deemed a termination, the contractor would be entitled to recover termination costs pursuant to the termination of convenience clause. 4/ Depending on when such Congressional

2/ Even in the presence of a suspension of work clause, a significant delay or lengthy suspension may be deemed to constitute breach of contract. Cf. Bruno Law v. United States, 195 Ct. Cl. 195 Ct. Cl. 370 (1971).

3/ It is significant to note that although S. 2397 affects the authority to expend and obligate funds, it does not impact the appropriations process. Thus, while appropriated funds exist, only the department's authority to spend those funds are affected. As a result the Government may not rely on the Anti-Deficiency Act, 31 U.S.C. §665, to defend actions brought by contractors who have been adversely affected by the operation of this legislation.

4/ The risk exists that the courts might consider lengthy inaction by Congress to constitute a total breach of contract, for which anticipated profits might be due. Cf. Bruno Law v. United States, supra.

termination occurred, the costs due a contractor under a termination clause could well approach the contract price itself. In this way, the Government would have to pay for all of the cost-overrun work already performed or incurred by the contractor, without receiving the full performance desired under the contract. Moreover, the necessity of reletting the contract for completion by another would greatly increase the costs of the individual project well beyond what the Government would have to pay if the contract were completed by the contractor whose performance costs had increased by 25 percent. Moreover, should the decision not to complete the project be made, enormous amounts of money will have been expended for partial performance having potentially no or minimal value to the Government.

As an additional problem, it is important to note that under Government contracts of the type affected by this legislation, the heads of the respective departments, as delegated to the contracting officers, are to make the ultimate decisions as to whether contracts should be terminated for the convenience of the Government. Because this bill effectively substitutes Congress as the authority making such termination decisions, it violates the contractual understandings of the parties and creates clear Government liability. See Schlesinger v. United States, 182 Ct. United States, 180 Ct. Cl. 446, 385 F.2d 427 (1967).

Thus, as a result of the legal problems discussed above, S. 2397 clearly will generate a significant increase in litigation, as contractors bring actions in either the Court of Claims (or the new Claims Court) or before the boards of contract appeals, to recover the additional costs sustained during any suspension of work, or to recover termination costs. The time, expense, and increased Government resources needed to defend this additional litigation may well outstrip any cost savings that would be effected through the provisions of this bill.

In addition, although many of these legal problems can be obviated through the use of a contract clause expressly providing for the Congressional review envisioned by S. 2397, and explicitly limiting all Government liability for resulting extra costs incurred by a contractor during delays, there will still be an overall increase in costs to the Government if S. 2397 is enacted. Any attempt to shift the risk of the extra costs to the contractors through such a contract clause will only result in higher bids as prospective contractors incorporate the risk of delays or terminations, resulting from the provisions of S. 2397, into their bid price. The Government will, thus, pay higher prices for all of its major procurements whether or not any delays resulting from suspensions in the spending and obligation authority actually occur.

3. Ambiguities

In addition to these legal questions, we believe that the proposed legislation, as written, contains technical ambiguities that must be clarified.

Although the clear thrust of S. 2397 was to create a mechanism whereby Congress could halt continued spending on contracts whose estimated costs of completion have increased by 25 percent over the original estimates, the bill, as drafted, has an exception which may make unenforceable that Congressional control. The legislation precludes expenditure and obligation of funds once Congress has been notified of a 25 percent cost overrun "except where the Government has an existing legal liability to pay". Section 3(b). While it is not believed to have been the intent of S. 2397, this clause may well be interpreted as allowing a contract to continue to completion notwithstanding the fact that the costs have increased by at least 25 percent. Once a valid contract has been signed, a legal obligation exists for the Government to pay for the performance required by the contract--subject to the Government's right of termination. In this way, since the Government has an "existing legal inability to pay" for the full contract performance, the departments and agencies may continue to obligate and expend funds under this exception (up to the amount appropriated by Congress) even though the costs have increased to the point that the proposed bill would otherwise require such authority to cease.5/ See New York Airways v. United States, 177 Ct. Cl. 800, 369 F.2d 743 (1966), where the Court of Claims found that a Government obligation created by statute will be enforceable in court even when Congress has not appropriated funds to meet that obligation.

As an additional ambiguity, it may be noted that, notwithstanding the fact that the bill purports to be limited to "civil" acquisitions, that term is defined in Section 1(1) to mean "any construction, acquisition, or procurement financed in whole or part with Federal funds * * *, the estimated costs of which * * * exceeds $50,000,000". Thus, the scope of the bill would appear to encompass any contract--military or civilian--which exceeds $50 million in costs. To the extent this bill was not intended to include military contracts, the definition of those contracts covered by the Act must be appropriately amended. On the other hand, if the bill is meant to cover military procurements, in addition to civilian procurements, the use of the term "civil" acquisition should be omitted. Similarly, although the thrust of

5/ Our discussion of the legal problems associated with this bill assumes that Congress did not intend to include such a clause which, in effect, reads out of the legislation the mechanisms created to control the increasing costs of major contracts.

the bill appears to be directed towards "contracts" the bill does not use the term "contract". To make clear what Congress intended to include under this legislation, we believe that the term "contract" should be used in place of "civil acquisition".

Moreover, we note that the preamble of S. 2397 states that it is intended to apply to "any major civil acquisition initiated after January 1, 1982." However, the definition of major civil acquisition contained in Section 1 of the bill includes all contracts regardless of when concluded. Clarification of this ambiguity is necessary.

The Department of Justice recommends against enactment of this legislation. The reporting requirements of S. 2397 will not provide Congress with any additional information as far as Department of Justice major procurements are concerned. More importantly, the stay of spending authority creates serious questions of both a legal and policy nature which affect the entire federal government.

The Office of Management and Budget has advised this Department that there is no objection to the submission of this report from the standpoint of the Administration's program.

Sincerely,

Robert A. McConnell
cmc

ROBERT A. McCONNELL
Assistant Attorney General
Office of Legislative Affairs

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

JUN 7 1982

The Honorable William V. Roth
Chairman, Committee on Governmental
Affairs
United States Senate
Washington, D. C. 20510

Dear Bill:

The following answers are submitted in response to the questions raised in your recent letter:

1. The General Accounting Office (GAO) had some difficulty in preparing its recent report, "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

   The Department of Transportation (DOT) has established the following criteria for major system acquisitions in accordance with the Office of Management and Budget Circular A-109, Major System Acquisitions:

   - total program costs are estimated to exceed $150 million; or
   - total R&D expenditures are estimated to exceed $25 million; or
   - the program warrants special management attention.

   For programs meeting the above stated criteria, quarterly status reports are submitted to the Assistant Secretary for Budget and Programs in the Office of the Secretary. These reports reflect the cost, schedule, and performance information shown in Enclosure 1.

2. Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

Documentation related to the review and approval of major system acquisitions is maintained by the Executive Secretary of the Transportation Systems Acquisition Review Council in the Office of the Secretary.

In addition, detailed contract and grant information is submitted on a monthly basis to the Office of Installations and Logistics in the Office of the Secretary. The specific data elements collected are shown in Enclosure 2 (Contract Information) and Enclosure 3 (Assistance Program Information).

3. How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

The initial GAO request for data was dated August 17, 1981. Data from the Federal Aviation Administration was forwarded to GAO on November 4, 1981. Data from the United States Coast Guard, the Federal Highway Administration and the Federal Railroad Administration was forwarded to GAO on November 24, 1981. Data from the Urban Mass Transportation was forwarded to GAO on December 30, 1981. We were able to provide the data requested.

4. The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

Considering the inflation in the last few years and the difficulty we have had in developing reliable initial project costs, I do not consider the cost growth we have experienced to be excessive.

We consider the following areas to be the most important causes of cost growth.

- inflation
- inaccurate estimates
- funding delays
- programs changes (scope, quantity, etc.)

5. Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

The Department of Transportation's procedures for reviewing and approving major system acquisitions have been in place since 1972. Although the procedures have been modified over the years, our current procedures call for review and approval by the Deputy Secretary of all major systems at the following key decision points:

- approval of mission need and authorization to explore alternative design concepts
- test and demonstration
- full scale development and limited production
- full production

This is supplemented by the quarterly status reports previously mentioned and the Department's program monitoring and evaluation system set forth in DOT Order 5100.3 (see Enclosure 4). We believe the required reviews have generally been effective in justifying the need for the program in terms of cost, schedule and technical performance at key decision points.

6. How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?

Obligational authority for the Federal share of Federal-aid Highways and Airport Development Grants, and projects funded under the National Highway Traffic Safety Administration's State and Community Highway Safety Grants are provided by contract authority in substantive law subject to limitations included in appropriation acts. Obligations incurred are liquidated with cash appropriations. All other DOT acquisition and/or construction funds are provided through annual appropriation acts. All acquisition funds are appropriated to be available until expended and most projects are full-funded, i.e., future obligations for later phases, installation of equipment, spare parts, etc., are funded with the original project.

7. How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

The Department does not have a specific process or mechanism to inform Congress about the status of major acquisitions other than the annual hearings before the Appropriations and the substantive committees of both Houses of Congress. More frequent status reports are made on specific programs when required by a provision in the appropriation or substantive law. In addition, reprogramming of funds can be accomplished only through a letter to Congress spelling out in detail the justifiction for the proposed action. Other status reports are made on specific projects in response to Committee requests.

8. What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

While DOT generally supports the need for status reporting on major civil acquisitions, our specific comments on the proposed legislation will be forwarded under separate cover after the bill has been thoroughly reviewed. As with responses on all legislation, DOT's reply will be cleared through the Office of Management and Budget.

Please contact me if you require any additional information.

Sincerely,

Drew

4 Enclosures

U.S. Department of Transportation
Office of the Secretary of Transportation

General Counsel

400 Seventh St., S.W.
Washington, D.C. 20590

JUL 6 1982

The Honorable William V. Roth, Jr.
Chairman, Committee on Governmental
Affairs
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

This is in reply to your request for views of the Department of Transportation on S. 2397, a bill

> "To require (1) the enactment of special legislation to continue the expenditure or obligation of funds on any major civil acquisition initiated after January 1, 1982, whenever the cost of such acquisition has increased or, on the basis of estimates, will increase over the initial estimate when the project was justified to the Congress by 25 per centum or more, and (2) reporting of status information on all major civil acquisitions."

Federal Funds for such acquisitions must exceed $50,000,000.

The Department opposes the bill in its present form. We believe Section 2 imposes an unnecessary paperwork burden on the civilian agencies by requiring these agencies to prepare detailed reports on major acquisitions. These reports would be similar to the Selected Acquisition Reports prepared on certain large Department of Defense programs. While we would not object to some additional reporting to Congress on larger programs, we believe the level of detail is much greater than necessary and oppose enacting the reporting requirement in statute. If these reporting requirements are mandated, we strongly recommend the dollar level be increased to at least $150,000,000 and the frequency of reporting reduced to either semi-annually or annually.

We also oppose Section 3(b) of the proposed legislation. That Section states "...no additional funds may be obligated or expended...." on a project once a 25 percent cost growth has been reported to Congress by the Office of Management and Budget unless authorizing legislation is enacted. The cost growth is related to the initial estimate provided to Congress. This requirement may result in stop work orders and termination notices whose associated costs and program delays could be significant. We do not believe this Section will promote efficiency in Government programs.

We have been advised by the Office of Management and Budget that there would be no objection to the submission of this report from the standpoint of the Administration's program.

Sincerely,

John M. Fowler

John M. Fowler

Major Systems Acquisition Technical Monitoring and Reporting

1. TECHNICAL MONITORING BACKGROUND

   a. This Order defines four key decisions which must be made by the Deputy Secretary. The approximate relationship between the four key decision points and the six life cycle phases in a typical R&D program is shown in Figure 1.

   b. Formal technical monitoring shall be initiated immediately after Key Decision #1--which authorizes the expenditure of funds for the project--and shall continue until Key Decision #4--which would authorize procurement of a system for operational use (i.e., full production).

   c. As part of the normal technical monitoring responsibilities, under DOT 7000.4A, the cognizant Secretarial offices shall maintain contact to the extent practicable in advance of Key Decision Point #1. This is intended to provide adequate background to support the initial TSARC review and recommendation.

2. TECHNICAL MONITORING OBJECTIVES. The technical monitoring of major systems acquisition is intended to ensure that:

   a. Technological developments in any approved major systems acquisition are proceeding toward the achievement of agreed-upon objectives in accordance with the schedule and cost plan approved by the Secretary;

   b. All appropriate alternatives are being examined;

   c. Anticipated and actual deviations from approved baselines are promptly reported to the Acquisition Executive, as appropriate; and,

   d. As the acquisition Progresses:

KEY DECISIONS VS. LIFE CYCLE PHASES

DOT ORDER

4200.14

KEY DECISION POINTS — LIFE CYCLE PHASES

MISSION NEEDS, IDENTIFICATION AND DESIGNATION OF MAJOR SYSTEMS

- O IDENTIFY MISSION NEEDS
- O DEVELOP PROGRAM TO SATISFY NEEDS
- O PREPARE INITIAL ACQUISITION PAPER AND PROGRAM/PROJECT PLAN

NO. 1 RESEARCH PHASE AND EXPLORATORY DEVELOPMENT PHASE

- O POTENTIAL SYSTEM DESIGN CONCEPT STUDIES
- O PRELIMINARY RESEARCH
- O EXPLORATORY SUBSYSTEM DEVELOPMENT
- O UPDATE ACQUISITION PAPER

NO. 2 ADVANCED DEVELOPMENT PHASE AND PROTOTYPE DEVELOPMENT PHASE

- O DESIGN
- O FABRICATION
- O TEST
- O EVALUATION
- O UPDATE ACQUISITION PAPER

NO. 3 PRELIMINARY OPERATIONAL DEPLOYMENT OR DEMONSTRATION PHASE

- O FULL-SCALE (PRODUCTION) DEVELOPMENT
- O INDEPENDENT TESTS OF SYSTEM PERFORMANCE
- O DEMONSTRATION IN EXPECTED OPERATIONAL ENVIRONMENT
- O LIMITED PRODUCTION
- O UPDATE ACQUISITION PAPER

NO. 4 OPERATIONAL PHASE

- O FULL PRODUCTION

Figure 1
Key Decisions vs. Life Cycle Phases

(1) Technological developments not contemplated at the time of Secretarial approval are appropriately considered;

(2) Changes in mission needs are properly addressed, and

(3) Proposed changes in the program plan are consistent with the approved mission needs.

3. TECHNICAL MONITORING PROCEDURES. The specific activities involved in technical monitoring are as follows:

a. Mission needs identification and designation of major systems (as described by Paragraph 9 of this Order).

b. Initial Acquisition Paper and Program/Project Plan.

(1) After the designation of the acquisition as a major system the Departmental element shall prepare the initial AP in accordance with the guidance set forth in Attachment 3 of this Order.

(2) Where an R&D appropriation is involved, appropriate OST personnel shall provide guidance to the Departmental element to ensure that a complete and effective systems approach is developed in the initial formulation of the AP. The AP will form the basis on which to approve specific funding for the Acquisition, as Key Decision #1.

c. Operating Plan.

(1) When funds for the acquisition are appropriated, an Operating Plan shall be prepared. This plan shall be submitted to the Acquisition Executive four weeks after an appropriation is received. The Operating Plan shall provide detailed information on program phasing, key decisions dates and major milestones to be achieved during the specific fiscal year for which funds are appropriated. The Operating Plan is to be in sufficient detail to provide an adequate baseline against which to monitor

progress through the fiscal year. The Plan shall be submitted to the Acquisition Executive for subsequent review by cognizant OST personnel.

(2) An Operating Plan shall be issued each year based on the actual appropriation received, and shall be updated as required during the year to reflect any significant changes.

(3) For major system acquisitions involving R&D, the Operating Plan of this section shall be the same as the R&D Operating Plan required by DOT 7000.4A.

d. Quarterly Status Reports.

(1) Quarterly Status Reports shall be prepared and submitted to the TSARC Executive Secretary within three weeks after the completion of each quarter. The Operating Plan shall be used as the reference baseline against which to report status. The Quarterly Status Reports shall include a brief summary in the format shown in Figure 2, and a detailed report in the format shown in Figure 3. The definition of the status codes is presented in Figure 4.

(2) The TSARC Executive Secretary shall arrange for the review of variances from the plan--in accordance with Figures 3 and 4--with the Departmental element, and reach agreement on appropriate corrective action. When considered warranted, the TSARC Executive Secretary shall advise the Acquisition Executive.

(3) The Quarterly Status Reports shall assess cost, schedule and technical performance experience against predictions, and such events as might significantly affect life cycle costs.

DOT 4200.14A
5-17-78

Attachment 4
Page 5

QUARTERLY STATUS REPORT SUMMARY

PROJECT TITLE: Rail Dynamics Laboratory

DATE OF REPORT: October 20, 1975

Status Code:

OVERALL ASSESSMENT OF STATUS:: 3

1 - On-Target
2 - Management Attention
3 - Critical

EVALUATION OF TECHNICAL PERFORMANCE: 1

EVALUATION OF SCHEDULE: 3

EVALUATION OF COST: 2

COMMENTS: The delay in approval of the proposed letter contract to has caused a five-month slip in the completion date and has increased the estimated cost by $125K. The R&D Operating Plan is being modified accordingly.

MAJOR ACHIEVEMENTS IN LAST QUARTER: Completed installation of Vertical Shaker. Initiated acceptance testing of Vertical Shaker.

KEY MILESTONES: Met: Complete installation of Vertical Shaker. Complete installation of Integrated Control System Network. (ICSN)

Missed: Sign letter contract with
Complete installation of Communication System.

KEY MILESTONES IN NEXT TWO QUARTERS (Including Project Reviews):

11/75 - Complete acceptance testing of Vertical Shaker.
11/75 - Complete acceptance testing of ICSN.
12/75 - Project Review.
1/76 - Complete installation of Communication System.
2/76 - Sign letter contract with
3/76 - Project Review.

KEY PROBLEM AREAS: Delay in approving letter contract. Failure of actuator during Vertical Shaker acceptance test.

Figure 2
Quarterly Status Report Summary

TOTAL FUNDS AVAILABLE: $3,400K

New FY 1976 Funds:	$2,800K
Carry-over Funds:	600K

FUNDS STATUS:

Planned Commitments to Date:	$1,800K
Actual Commitments to Date:	1,650K
Planned Obligation to Date:	1,200K
Actual Obligations to Date:	-0-

COMMENTS: The delay in approving the letter contract has prevented the obligations of the planned FY 1976 funding.

Figure 2
Quarterly Status Report Summary

(OPERATING ELEMENT)
MAJOR SYSTEMS ACQUISITION (MSA)
QUARTERLY STATUS REPORT

PROGRAM TITLE:

REPORT PERIOD:

PROGRAM MANAGER:

1.0 HIGHLIGHTS
(Quarterly Status Report Summary)

2.0 TECHNICAL DISCUSSION OF SIGNIFICANT CHANGES
(Cover each element of the project separately.)

3.0 MILESTONE CHART
(Attach milestone chart, indicating milestones met or missed.)

4.0 FINANCIAL MANAGEMENT
(Attach financial chart, indicating status of actual costs, commitments, and obligations against plan.)

5.0 VARIANCES FROM PLAN
(Amplify on any significant variances from the plan--in technical performance, schedule, or cost as reported in sections 2.0, 3.0, 4.0 -- and indicate the significance to the overall project.

6.0 ANTICIPATED ACCOMPLISHMENTS
(Discuss key accomplishments planned for the next two quarters.)

7.0 KEY PROBLEM AREAS
(Discuss potential impact, and corrective action planned.)

8.0 MEETING/CONFERENCES/PROGRAM REVIEWS
(Summarize key meetings/conferences/program reviews, separately, (1) for the report quarter, indicating purpose, attendance, and results, and (2) planned for the next two quarters, indicating purpose and attendance.)

9.0 LIFE CYCLE COSTS
Assess any events since the previous Quarterly Status Report which might significantly affect life cycle costs.

Figure 3
Quarterly Status Report

99-849 O - 82 - 12

STATUS CODE DEFINITION AND PROGRAM STATUS CRITERIA

The following criteria provide more specific guidelines for identifying when a program is significantly off target.

On-target Status*

1. Not more than 10 percent off budget as reflected in the operating plan.
2. Within 3-4 weeks of meeting major non-public milestone dates (milestones to which the Secretary has not publicly committed the Department).
3. Making acceptable progress toward achieving objectives and performance measures, and indicating that this satisfactory performance will continue.

Management Attention Status**

1. Between 10-20 percent off budget as reflected in the operating plan.
2. Between 1-3 months of meeting major non-public milestone dates.
3. Results indicate program may not be able to achieve desired objective and performance measures.
4. Although current status is still on target, a situation is developing that will cause problems in the future.

Critical Status**

1. Over 20 percent off budget as reflected in the operating plan.
2. More than 3 months behind meeting major non-public milestone dates or behind any milestone to which Secretary has publicly committed the Department.
3. Results to date show the program will not meet desired objectives and performance measures without budget or legislative relief.

* - No action required
** - The TSARC Executive Secretary shall advise the Acquisition Executive, as appropriate

Figure 4
Status Code Definition

Submitted by: _____ _____
Program Manager Date

Approved by: _____ _____
Associate Adm. for R&D (or equivalent) Date

Figure 4
Status Code Definition

e. Formal Program Reviews

(1) Formal Program Review shall be conducted for each major system acquisition, as arranged by the Departmental element. These reviews may be conducted in DOT, at the contractor's plant, or at any other appropriate location. Quarterly reviews are suggested as a nominal target, but can be more or less frequent depending on the specifics of a given acquisition at a given time.

(2) To avoid any additional workload, these should be the same reviews normally conducted as part of a program, but representatives of cognizant Secretarial Offices shall be invited to attend as observers.

f. Program Monitoring Reports.

(1) After a Formal Program Review, Secretarial Office representatives attending shall provide any comments to the TSARC Executive Secretary.

(2) The TSARC Executive Secretary shall coordinate these comments, and when considered appropriate, shall arrange for the preparation of a Program Monitoring Report, in the format shown in Figure 5. This report is intended to provide an independent evaluation of project status, whenever a significant difference of opinion might develop. This report shall be prepared only on a "by exception" basis, and the Acquisition Executive advised as appropriate.

g. Operating Plan Changes

(1) All Operating Plan Change Proposals described below are to be submitted to the TSARC Executive Secretary, who will forward the proposed changes to the cognizant Secretarial Offices for review and comment.

(2) The TSARC Executive Secretary shall coordinate these comments and make recommendations to the Acquisition Executive regarding any change proposal which:

(a) affects the attainment of established overall program technical, cost, or schedule goals to a degree considered significant;

DOT 4200.14A
5-17-78

Attachment 4
Page 11

PROGRAM MONITORING REPORT

Type of Report: Status Evaluation Report

Report Period: Second Quarter of FY 1973

Performing Administration: Federal Railroad Administration

Program Title: Tracked Air Cushion Research Vehicle (TACRV)

Summary: In the course of monitoring the TACRV project, I have become increasingly convinced that the channel guideway is not the way to go for an operational intercity TACV. It is too expensive to build, and raises a basic question as to the economic viability of the TACV for intercity service. The advantages claimed for the channel guideway--i.e., better resistance to side winds and inherently safer--are considered small when compared with the cost of the system.

As a result, I believe it is time for a basic re-study of the intercity TACV project. Until the situation is clarified, it is my opinion that the TACV test program should be continued, but only sufficient guideways should be built to permit engineering tests up to 300 mph. This is estimated to require about 8 miles of guideway. The completion of the 22 mile loop should not be authorized until the results of the re-study are evaluated.

Program Status: The technical work is proceeding satisfactorily in accordance with the current plan. However, a basic question has arisen as to the future course of the project.

Action Required/Recommended: It is recommended that review the situation with FRA to establish a future course of action. Several options are discussed in the attached "Discussion" section. My recommendation is that (1) a basic re-study of the entire TACV project should be initiated as soon as practicable, and (2) completion of the 22 mile loop should not be authorized until the results of the re-study evaluated.

NOTE: FOR ILLUSTRATION ONLY

ADDITIONAL DISCUSSION SHEETS NOT INCLUDED

Program Monitor: _____ Org. Code: _____

Signature: _____ Date: _____

Distribution: Cognizant OST Offices

FOR OFFICIAL USE ONLY

Figure 5
Project Monitoring Report

CODING INSTRUCTIONS

1 — OPERATING ELEMENT

A - FAA
F - STA
G - USCG
M - FHWA
L - SLSC
O - OST
P - RSPA
R - FRA
S - NHTSA
U - UMTA

2-3 — PROCUREMENT OFFICE

See DOT Order 1340.5, Attachment 1, Paragraph 3.4

36 — KIND OF ACTION (CIS)

0 Record Correction
1. New Contract
2. Modification - increase
3. Modification - decrease
4. Order under Another Agency's Contract
5. Termination for Default
6. Termination for Convenience
7. Completion
8. Orde under GSA Supply Schedule
9 BOA or Indefinite Quantity/ Delivery Contract
D. Deletion

30 — KIND OF ACTION (FPDS)

1. Initial Letter Contract
2 Definitive Contract Superceding Letter Contract
3. New Definitive Contract
4. Order under Reporting Agency's BOA or Indefinite Quantity/Delivery Contract
5. Modification
6. Order under GSA Supply Schedule
7. Order under Another Agency's Contract
8. Termination for Default
9. Termination for Convenience

48-49 — SERVICE AND PRODUCT CODE

See DOT Order 1340.5, Attachment 1, Paragraph 3.11

50 — GENERAL PRODUCT LINE

See DOT Order 1340.5, Attachment 1, Paragraph 3.12

51 — TYPE OF CONTRACT

A - Fixed Price Redetermination
J - Firm Fixed Price
K - Fixed Price Economic Adjustment
L - Fixed Price Incentive
R - Cost Plus Award Fee
S - Cost no Fee
T - Cost Sharing
U - Cost Plus Fixed Fee
V - Cost Plus Incentive Fee
Y - Time and Materials
Z - Labor Hours

74-85 — CONTRACTOR AND PERFORMANCE LOCATIONS

86-97

FIPS Publication 55 and NPS Letter Circular 1067-1

100 — MODIFICATION REASON

1. Add On
2. Changes Clause
3. Other

101-109 — CONTRACTOR IDENTIFICATION

DUNS Number Assigned to Contractor

110 — IDENTIFICATION CODE DESIGNATOR

See DOT Order 1340.5, Attachment 1, Paragraph 3.20

111-112 — TYPE OF BUSINESS

A1 - Small Disadvantaged Business: 8(a)
A2 - Small Minority Business. Non 8(a)
A3 - Other Small Business (includes individuals)
B1 - Large Minority Business
B2 - Other Large Business
C1 - Private Educational Institution
C2 - Private or Non-Profit Hospital
C3 - Research Institutions, Foundations, Laboratories
C4 - Other Non-Profit or Not-for-Profit Institution
D1 - State/Local Educational Institution
D2 - State/Local Hospital
D3 - State/Local Research Organizations
D4 - Other State/Local
E1 - Procured and Used Outside U.S./Possessions
E2 - Other Procurements Outside U.S./Possessions (Foreign Purchases Used Inside U.S.)

113 — PROCUREMENT METHOD

1. Two-Step Formal Advertising
2. Other Formal Advertising
3. Competitive Negotiation
4. Non-competitive Negotiation

114-115 — EXTENT OF COMPETITION IN NEGOTIATION

COMPETITIVE NEGOTIATED
A1 - Small Business Total Set-Aside
A3 - Labor Surplus Set-Aside
A4 - Labor Surplus/Small Business Set-Aside
A9 - Other Negotiated Competitive

NON-COMPETITIVE NEGOTIATED
B1 - Buy Indian
B2 - 8(a) Program
B3 - Follow-on After Competition
B9 - Other Negotiated Non-competitive

116 — NEGOTIATION AUTHORITY

41 USC, 10 USC for USCG. See DOT Order 1340.5, Attachment 1, Paragraph 3.24

146 — MULTI YEAR PROCUREMENT

1. Is Multi-year
2. Is Not Multi-year

147-150 — SPECIAL CLAUSES

See DOT Order 1340.5, Attachment 1, Paragraph 3.30

160 — LABOR SURPLUS AREA PREFERENCE

1. Labor Surplus Area - No Preference
3. Labor Surplus Area - Tie Bid Preference
5. Not Labor Surplus Area Award
7. Total Labor Surplus/Small Business Set Aside Preference (P.L. 95-89)
8. Total Labor Surplus Set-Aside Preference (P.L. 95-89)

161 — SUBJECT TO STATUTORY REQUIREMENTS

A. Walsh-Healey Act, Manufacturer
B. Walsh-Healey Act, Regular Dealer
C. Service Contract Act
D. Davis-Bacon Act
E. Not subject to statutory requirements above

162 — WOMAN-OWNED BUSINESS

0. Exempt
1. Is Woman-owned
2. Is Not Woman-owned

163 — AFFIRMATIVE ACTION

1. Affirmative Action Plan is on File
2. Affirmative Action Plan not on File

164 — PREVIOUS CONTRACT WITH AFFIRMATIVE ACTION PLAN

1. Yes
2. No

165 — CONSULTING SERVICE AWARD

1. Yes 2. No
See DOT Order 1340.5, Attachment 1, Paragraph 3.38

166 — COST ACCOUNTING STANDARDS

1. Clause Required
2. Clause Not Required

167 — WARRANTY CLAUSE

1. Included in Contract
2 Not Included

168 — GOVERNMENT-FURNISHED PROPERTY

1. Provided
2. Not Provided

169 — MINORITY BUSINESS SET ASIDE

1. Yes
2. No

170 — MINORITY BUSINESS SUBCONTRACTS

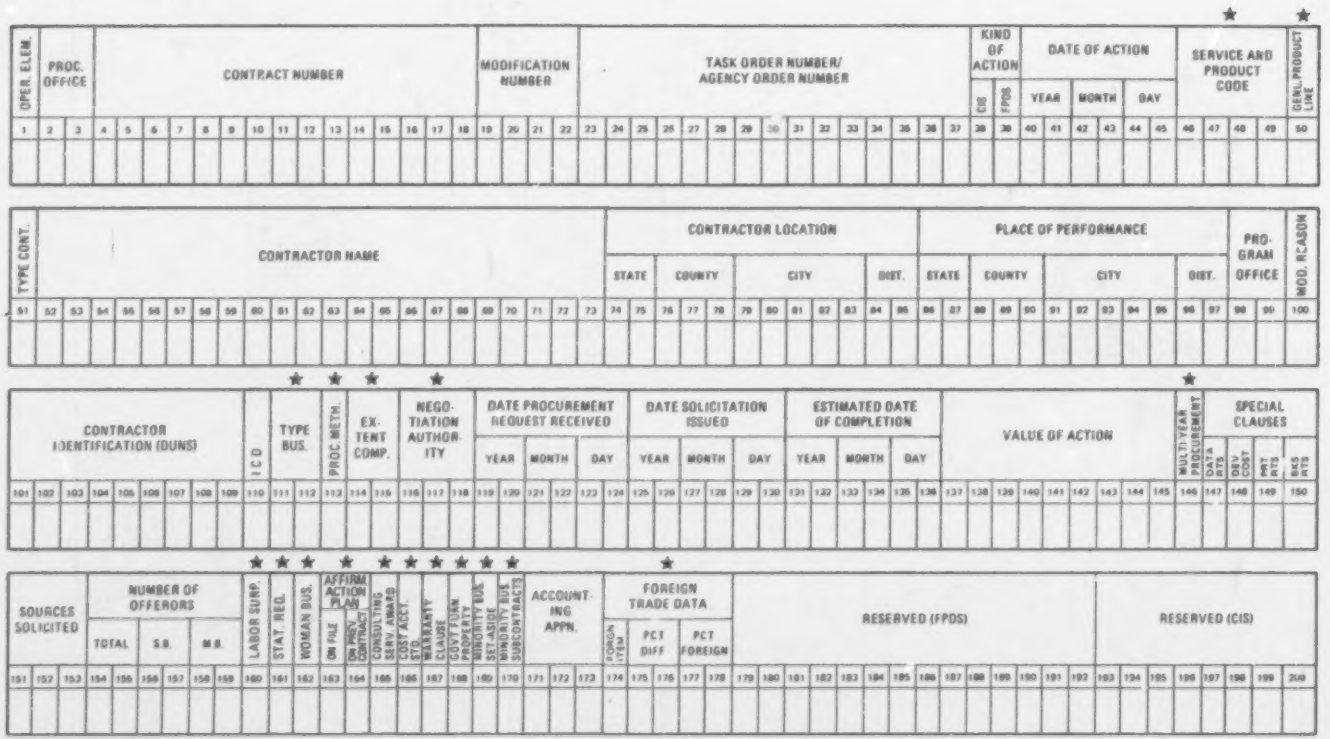
1. Yes
2. No

174-178 — FOREIGN TRADE DATA

See DOT Order 1340.5, Attachment 1, Paragraph 3.45

[illegible] must be completed for modifications to contracts awarded before October 1, 1978.

DEPARTMENT OF TRANSPORTATION
CONTRACT INFORMATION SYSTEM
DATA INPUT FORM

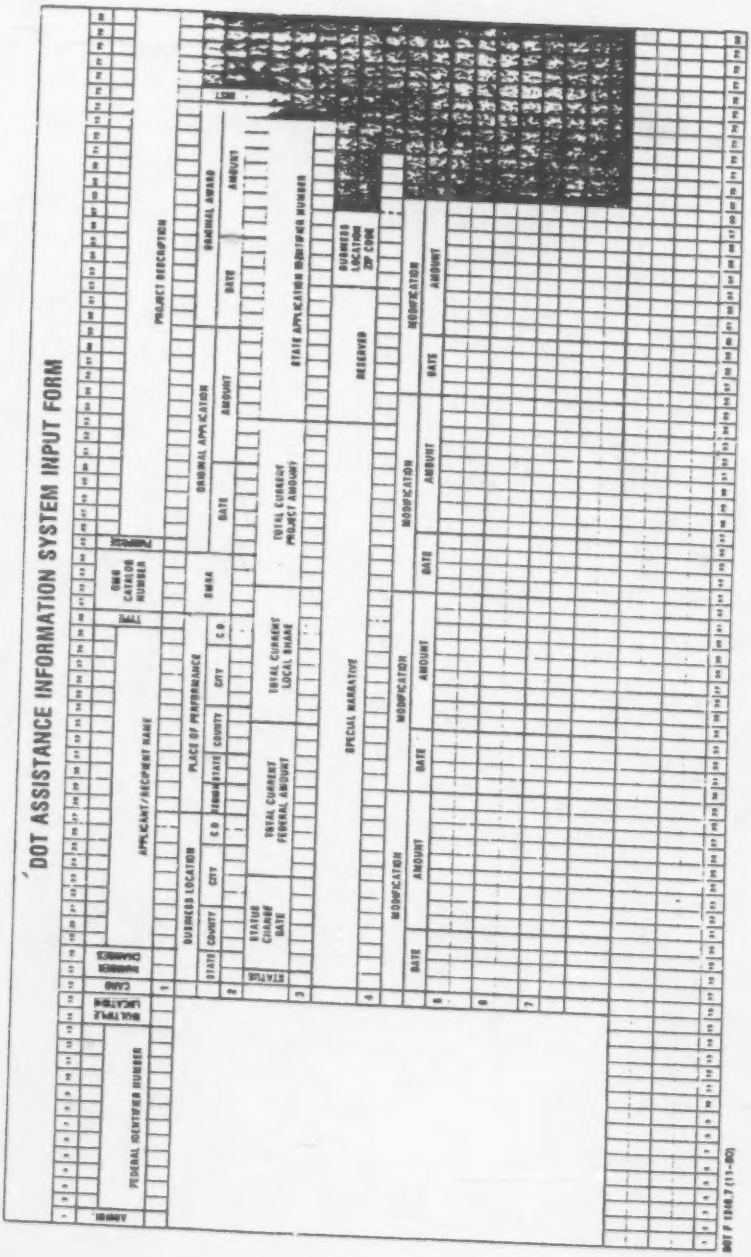


Form DOT F. 4220.11 (8-70)

PROCUREMENT ACTION REPORT
(SEE REVERSE FOR CODING INSTRUCTIONS)

DOT 3740.7A
12-19-80

ATTACHMENT 3
Page 1



Department of Transportation
Office of the Secretary
Washington, D.C.

ORDER

DOT 5100.3

11-22-78

SUBJECT: DEPARTMENTAL PROGRAM MONITORING AND EVALUATION SYSTEM (PMES)

---

1. PURPOSE. This Order establishes a Departmental Program Monitoring and Evaluation System (PMES). The system has two related elements, the purposes of which are:

   a. to monitor progress of selected major operating activities, projects and/or programs (referred to hereafter as programs) in meeting stated Departmental milestones and objectives (program monitoring), and

   b. to evaluate the effectiveness, efficiency and economy of major programs in accordance with a systematic review process for use in decision making (program evaluation).

2. REFERENCES.

   a. DOT 4200.14A, Major Systems Acquisition Review and Approval, of 5-17-78, which prescribes the procedures for implementing OMB Circular A-109.

   b. DOT 4200.9A, Acquisition Review and Approval, of 8-29-78, which prescribes the procedures for acquisitions which are not subject to the detailed management requirements of DOT 4200.14A.

3. BACKGROUND AND GENERAL OBJECTIVES.

   a. The successful implementation of Secretarial policies is largely dependent on how well Department of Transportation managers plan and conduct programs responsive to the national transportation problems. A primary objective is to improve Departmental program management through the introduction of a formal program monitoring and evaluation process.

   b. Effective implementation of the PMES requires the development of well-defined, measurable program objectives and milestones which can be used to monitor and evaluate performance. Objectives and milestones are developed by the Operating Elements or the Secretarial

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DISTRIBUTION: All Secretarial Offices
All Operating Elements

OPI: Office of Programs and Evaluation

Offices as part of the program approval or implementation process. An objective of PMES is to formalize these activities for programs that require the attention of top Departmental management. PMES will also help to integrate program monitoring and evaluation results with policy development, program planning, and budget development/ execution in the Department. Finally, PMES will support other Departmental management systems, such as (1) the Transportation System Acquisition Review Council (TSARC) review of system acquisitions under DOT Orders 4200.9A and 4200.14A, (2) the Departmental budget process, and (3) the Spring Preview process.

4. APPLICATION.

a. Program Monitoring. This Order applies to the monitoring on a continuing basis of selected programs of Secretarial interest, under procedures set forth herein. This Order provides a mechanism to ensure monitoring of important programs which do not come under the major system acquisition procedures of DOT Order 4200.14A or the TSARC procedures of DOT Order 4200.9A.

b. Program Evaluation. This Order applies to major program evaluation activities conducted in the Department, including the Office of the Secretary and the other Departmental elements. These include program evaluations which are included in the Annual Evaluation Agenda (see Page 5, paragraph 8b) and such other significant program evaluations as may be identified by the Operating Elements as being of interest at the Secretarial level.

5. DEFINITIONS.

a. Program means an organized set of activities directed toward a common purpose, objective, or goal undertaken or proposed by a DOT element in order to carry out responsibilities assigned to it. In the PMES context, the term program can refer to broad activity areas with national goals and objectives, or to significant elements, problems, issues, or projects which are contained within these broad activity areas.

b. Program Monitoring means a continuing managerial oversight process which tracks the progress of ongoing programs toward meeting established objectives and milestones. Program monitoring involves overseeing program actions with respect to the timeliness of results and effective use of allocated resources in order to identify as early

as possible potential problems that may significantly deter the attainment of desired objectives and milestones, and to recommend corrective action as appropriate.

c. Program Evaluation means a systematic analysis of a program or some aspect of a program to assess its effectiveness in achieving objectives. There are several types of program evaluations, each designed to serve different purposes. These are defined for the purposes of this Order in Attachment 1. Evaluations will be planned, organized and conducted so as to have utility for decision makers. Evaluations involve information gathering, study and analysis relevant to decision making and to the oversight function of management.

6. SPECIFIC OBJECTIVES. The specific objectives of the PMES are to:

a. Monitor and evaluate selected programs, and recommend program improvements as appropriate;

b. Assess the overall effectiveness, efficiency, and economy of selected programs;

c. Provide a better basis for making program trade-offs and adjustments in resources among programs;

d. Provide an information base to facilitate the expansion of effective programs and the elimination of ineffective ones;

e. Provide a monitoring mechanism which will surface potential problem areas for senior management attention, and recommend corrective action as appropriate;

f. Provide a sound basis for predicting likely consequences of alternative decisions on future Departmental programs; and

g. Provide an additional information source to assist in policy development and long-range program planning.

7. PROGRAM MONITORING PROCEDURES.

a. Major elements of the DOT Program Monitoring System are shown on the flow chart, Attachment 2. The system will track the performance of selected programs against the milestones (specific actions taken, decisions reached, cost or obligation targets, procurement actions, etc.) set forth in planning or other documents which establish expected program performance or objectives.

b. The Assistant Secretary for Budget and Programs will develop and coordinate the identification of candidates for program monitoring, and will maintain a Program Monitoring List (PML) identifying current programs to be monitored. The PML will include: (1) all Major Systems Acquisition (MSA) programs (as designated under DOT Order 4200.14A), (2) selected programs designated as a result of TSARC interest (in accordance with DOT Order 4200.9A), and (3) a limited number of additional programs which require systematic oversight by Departmental management because of their importance, magnitude and/or high Executive Branch or Congressional interest. Program candidates will be solicited from the Departmental elements and from Secretarial Offices.

c. The Assistant Secretary for Budget and Programs, after review of program candidates, will prepare and recommend a PML for the Deputy Secretary's approval. After approval, each Departmental element will be advised as to which of its programs will be monitored under the PMES, and monitoring activities will proceed.

d. For the MSA programs on the PML, the specific activities involved in technical monitoring will be those established and defined in Attachment 4 of DOT Order 4200.14A. For other programs included in the PML, the Departmental elements will prepare periodic reports on progress toward meeting a set of objectives or milestones in a schedule of activities developed by the Departmental elements and approved by the Assistant Secretary for Budget and Programs.

e. The PML shall be updated as necessary, but at least once a year. The annual update will be based on the May 1 submissions by each Departmental element, as required by DOT Order 4200.14A for MSA candidates and by DOT Order 4200.9A for TSARC review candidates. The annual review and update of the PML will be scheduled immediately following the Spring Preview each year on or about June 1, and will include all programs in the PML.

f. Status reports on each item in the PML shall be submitted to the Assistant Secretary for Budget and Programs, with a copy to the Executive Secretary of TSARC, on an agreed upon schedule, but at least each quarter. The form of the report should be tailored to the program being monitored. For MSA and TSARC designated programs, the reports should conform to the requirements of DOT Orders 4200.14A and 4200.9A, respectively. For other programs, the status code definitions and program status criteria--as outlined in Attachment 4, Page 8, of DOT Order 4200.14A--should be used. The reports should be

furnished within three weeks after the end of each quarter beginning January 1, 1979.

g. After reviewing the PAL reports, the Assistant Secretary for Budget and Programs shall arrange, as appropriate, to review significant variances from the plans or schedules with the cognizant Departmental element, and reach agreement on corrective action. When the area of responsibility of another Secretarial Office is involved (as in the case of programs designated pursuant to DOT Orders 4200.14A and 4200.9A), coordination will be conducted with the appropriate Assistant Secretary. After this, the Assistant Secretary for Budget and Programs will forward a summary to the Deputy Secretary highlighting significant accomplishments, problems or issues which require management attention or action. The reports will be discussed with the Departmental element concerned and its views will be included in the report submitted to the Deputy Secretary.

8. PROGRAM EVALUATION PROCEDURES.

a. Major components of the DOT Program Evaluation System are shown on the flow chart, Attachment 3. The evaluation system will provide an orderly process for identifying candidates for program evaluations, selecting them, assigning responsibility for their conduct, monitoring their performance, assessing their results, and taking appropriate management actions consistent with evaluation findings.

b. The Assistant Secretary for Budget and Programs shall establish and maintain an Annual Evaluation Agenda (AEA) identifying major program evaluations currently underway and planned in the Department.

c. The Assistant Secretary for Budget and Programs shall coordinate the identification of program candidates and the recommendations for the AEA with the Departmental elements concerned. Care shall be taken to ensure compatibility with the management evaluation and internal audit schedule, and the Assistant Secretary for Administration and the Assistant Secretary for Budget and Programs will modify the management evaluation and internal audit schedule and/or the AEA, as required to ensure consistency. The recommended AEA shall be reviewed and approved by the Deputy Secretary.

d. The Deputy Secretary shall issue the approved AEA, making the official evaluation assignments. The AEA will indicate (1) the Departmental element having primary responsibility, and (2) the other Departmental elements whose participation is required. Those

evaluations requiring Secretarial approval will be indicated. All Departmental elements shall conduct and/or support the evaluations, as required. Within one month after the effective date of this Order, and subsequently as part of their annual Spring Preview submissions, each Departmental element shall submit to the Assistant Secretary for Budget and Programs, a listing of planned evaluation activities for the current fiscal year and the following fiscal year. This should include any recommendations on (1) evaluations for which OST should assume primary responsibility, (2) required participation by other Departmental elements, and (3) other factors considered pertinent in formulating the AEA.

e. When Secretarial approval of the findings or recommendations of an evaluation is required, the Assistant Secretary for Budget and Programs will coordinate the review of the report with the Departmental elements involved, and forward the coordinated report through the Deputy Secretary to the Secretary for approval. Upon approval, appropriate guidance shall be implemented promptly.

9. ANNUAL REPORTS ON EVALUATIONS. As part of their annual Spring Preview submission, each administration shall submit a report to the Deputy Secretary summarizing the evaluation activity of their Departmental element for the preceding year. The report shall include a summary in the format of Attachment 4 (or equivalent) for each evaluation program included in the current AEA, as well as other significant program evaluations performed by units of the operating element for use by top management of the operating element.

10. RESPONSIBILITIES.

a. The Deputy Secretary is responsible for reviewing and approving the Program Monitoring List and the Annual Evaluation Agenda.

b. The Assistant Secretary for Budget and Programs is responsible for the direction, management and administration of the Program Monitoring and Evaluation System.

c. The Assistant Secretary for Administration is responsible for modifying the management evaluation and internal audit schedule and/or proposing changes in the Annual Evaluation Agenda as required to ensure compatibility and consistency.

d. The Head of each Departmental operating element is responsible for:

(1) Establishing or modifying internal program monitoring and evaluation systems to assure compatibility with the requirements of this Order.

(2) Designating an official to serve as that organization's key representative on all matters relating to PMES.

(3) Providing the required support in establishing the PML and in the subsequent program monitoring activities.

(4) Submitting the annual reports on evaluation activities--including planned evaluations and the summaries of completed evaluations.

(5) Conducting and supporting the evaluation activities in accordance with the AEA.

11. USE OF EXISTING SYSTEMS. It is the intent of this Order to use systems currently in operation in the Departmental operating elements to the maximum extent possible. Where there are existing documents or reports that provide the same information as outlined herein, these may be used or adapted to meet the requirements of this Order.

FOR THE SECRETARY OF TRANSPORTATION:

Alan Butchman
The Deputy Secretary

TYPES OF EVALUATION

(1) Policy Evaluation: Is used to help managers understand the extent of the transportation problems or needs which exist and to set realistic goals and objectives in response to such problems or needs. It may be used to compare actual program operations with the program's legally established purposes in order to enable decision makers to adjust program efforts to assure legal compliance. The result of effective policy evaluation is a product that is useful to management in deciding program policies and goals.

(2) Strategy Evaluation: Is used by managers as an aid to decide which strategy a program should adopt to accomplish its goals and objectives at minimum cost. It may include cost-benefit analyses of alternative strategies which managers could use to attain goals and objectives. In addition, strategy evaluation might include alternative specifications of the program design itself, including detailing milestones and flow networks, manpower specifications, progress objectives, budget allocations, and the like, which would aid management in selecting the most promising strategy and program design.

(3) Performance Evaluation: Compares actual performance with that planned, both in terms of resource utilization and production. This is sometimes referred to as the efficiency and effectiveness type of evaluation. It is used by management to redirect program efforts and resources as well as to redesign the program structure. (Note: Program monitoring is a continuing oversight of an ongoing program, while performance evaluation is a "one-time" analysis to support a specific decision or set of decisions.)

(4) Outcome Evaluation: Is used by management to identify the results of a program's effort. It seeks to answer management's question, "What difference did the program make?". It provides management with a statement about the net effects of a program after a specified period of operation. As a result of the information generated from this type of evaluation, management may make more informed decisions about: (a) the extent to which the problems and needs which gave rise to the program still exist; (b) ways to reduce or eliminate adverse impacts and enhance desirable impacts; and (c) program design adjustments which may be indicated for the future.

All the above definitions apply to internal evaluation, that is, where Departmental management plans, organizes and controls its evaluation resources to help make program decisions. The other major form of evaluation is that

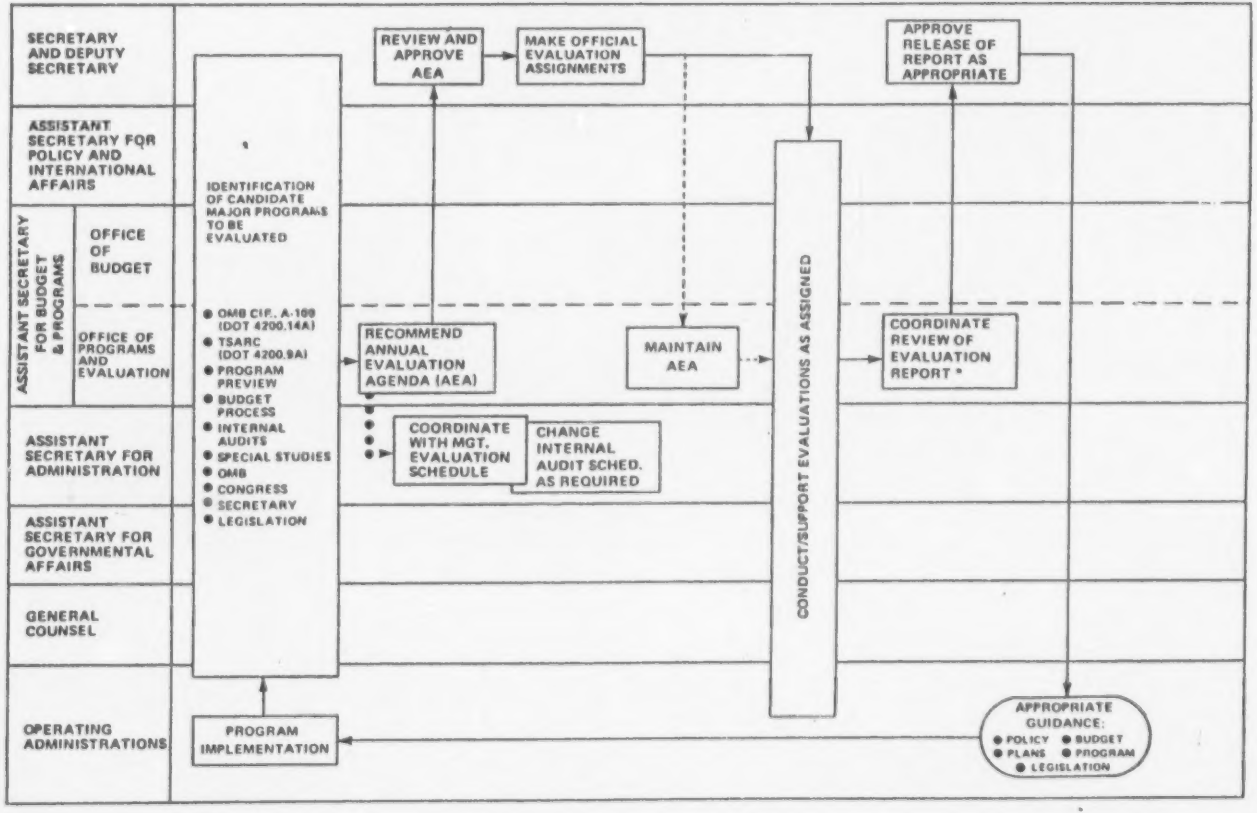
which takes place outside the program management chain, where managers do not have primary control over the design, conduct, or interpretation of the study. This type of evaluation within the Department is referred to as internal auditing and is performed by the Office of Audits, under the Assistant Secretary for Administration. Independent reviews are also conducted by other organizations such as the Civil Service Commission, Office of Equal Opportunity, Office of Management and Budget, Inspector General, etc. Additionally, evaluations may be conducted by Congressional Budget Office, the Congressional Research Service, and the Office of Technology Assessment. (NOTE: The foregoing definitions draw upon documents used by the Federal Executive Institute.)

DOT 5100.3
11-22-78

ATTACHMENT 2
Page 1 (and 2)

DOT PROGRAM MONITORING SYSTEM

DOT PROGRAM EVALUATION SYSTEM



* The Deputy Secretary may assign to other Departmental elements

DOT 5100.3
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S A M P L E

ATTACHMENT 4
Page 1 (and 2)

PROGRAM EVALUATION SUMMARY

Performing Element: OST (TST)

Title of Evaluation: Emergency Locator Systems Assessment

Date of Evaluation Report: November 1977

Evaluation Report No.: DOT-TST-78-5

Evaluation Type: Strategy Evaluation

Primary Use: To support Secretary's decision on DOT participation in satellite-aided search and rescue demonstration program proposed by NASA.

Secondary Use: To support efforts to improve the current emergency locator transmitter (ELT) devices.

Total Staff Years: OST -- 3 MY

Contractor Support Cost: None

Total Estimated Cost: $125K

Brief Description: In an effort to improve the national search and rescue operation, NASA has proposed the use of satellites to monitor and locate electronic emergency locator transmissions. A one-year demonstration program, currently scheduled to start in 1982, has been proposed to confirm the potential gains which may be realized. This is to be a cooperative effort, including--nationally--NASA, DOD, DOC, and DOT, and--internationally--Canada, France, and perhaps other countries.

The key recommendations are that DOT should (1) initiate a program to improve the current ELT devices (regardless of whether the satellite program proceeds or not), (2) support the proposed NASA satellite demonstration program, and (3) not commit to any operational system at this time.

S A M P L E

DEPARTMENT OF THE TREASURY
OFFICE OF THE GENERAL COUNSEL
WASHINGTON, D.C. 20220

JUL 1 1982

Dear Mr. Chairman:

This letter is in response to your request for views on S. 2397, the "Cost Reduction in Major Procurements Act" and for responses to questions to assist your committee in reviewing and considering S. 2397.

S. 2397 would require enactment of special legislation to continue the expenditure or obligation of funds on any major civil acquisition exceeding $50,000,000 initiated after January 1, 1982, whenever the cost of the acquisition has increased or is estimated to increase over the initial estimate by 25 percent or more. It would also require the reporting of status information on all major civil acquisitions.

As we have indicated in the enclosed responses to your questions, this Department would anticipate very few acquisitions which meet the proposed threshold in S. 2397. Nor, based on our experience, do we foresee overruns of this magnitude in the Department's procurements. Therefore, we would anticipate that the bill would have only minimal impact on this Department's operations.

However, notwithstanding the absence of any direct impact on the Department, we have the following comments and observations:

(1) if the $50 million threshold remains in the bill, the Department of the Treasury will have few procurement actions that will meet this level and even fewer if the 25 per centum factor is added;

(2) the bill would eliminate authority to obligate or expend funds on any acquisition once it exceeded - or it was estimated that it would exceed - the original estimate by 25 percent. The bill exempts payments for which the Government has an existing legal obligation to pay. Legal obligation may generally attach only after completion and acceptance of segments of the contractors work. Therefore, the bill may require that all work on the acquisition be stopped, unless new authorizing legislation is enacted. Even if stoppage resulted in significant additional costs, threat to life or

99-849 O - 82 - 14

property, or an impairment of the national security the agency could not permit continued performance by the contractor. To do so would presumably violate the Antideficiency Act and expose the responsible officials to criminal penalties.

We question whether this is an efficient way to run the Government. While we share your concern over uncontrolled cost overruns in government procurement, we feel that better control methods are available. Acquisitions of the magnitude addressed in the bill will be a major program element of most civilian agencies. As such, such acquisitions would be important budget elements. In our opinion oversight as a part of the budget process would be a more efficient method of control than time-consuming and costly quarterly reports to the Congress.

We appreciate the opportunity to comment on this matter.

The Office of Management and Budget has advised that there is no objection from the standpoint of the Administration's program to the submission of this report to your Committee.

Sincerely yours,

Margery Waxman

Deputy General Counsel

The Honorable
William V. Roth, Jr., Chairman
Committee on Governmental Affairs
United States Senate
Washington, D.C. 20510

Enclosure

RESPONSES TO QUESTIONS IN SENATOR ROTH'S
LETTER OF MAY 6, 1982

1.) The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

Response: The Department of the Treasury has very few contracts which meet the $50 million threshold that is proposed for "major acquisitions" in Senator Roth's letter to Secretary Regan. However, the Department has three systems which it uses to monitor any procurements that may be considered major: first, the Federal Procurement Data System for all procurements over $10,000; second, the Major Acquisition Tracking System (MATS), for all procurements over $1 million; and, third, compliance with OMB Circular A-109, "Major Systems Acquisitions," for all procurements over $10 million and others that exceed a $500,000 level, such as real property acquisitions, replacement of equipment or facilities at a different level of technology, and redesign of basic processes or procedures.

The Major Acquisition Tracking System is maintained manually as is the Major Systems Acquisitions System. The Federal Procurement Data System is a computerized system that is provided the General Services Administration's Federal Procurement Data Center for the use of the Office of Federal Procurement Policy, Office of Management and Budget, other oversight agencies, and the Congress.

2.) Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

Response: As stated above, each level of procurement (which is defined as major) is fed into the Departmental staff offices by the headquarters of each of our bureaus. In addition, each bureau has its own system of maintaining control and oversight over its respective projects.

3.) How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

Response: We cannot address this question because the Departmental Office of Procurement was not asked and did not respond to the General Accounting Office on the Status of Major Acquisitions.

4.) The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

Response: The Internal Revenue Service's contract for replacement of computer systems at the service centers was one of the 376 projects reviewed by GAO and unlike all other agencies reviewed, IRS's contract has not exceeded the Congressional budget estimate but rather is 17% less than the budget. The Internal Revenue Service is, however, in the early stage of the procurement cycle and that fact might contribute to the lack of cost overruns and contractor delay.

5.) Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

Response: While the GAO report does not cite cost growth for the Department of the Treasury, we have taken the initiative to develop the Major Acquisition Tracking System, which went into effect January, 1982; this system plots the key action points in each major procurement, with a monitoring mechanism for the cost as originally planned and the cost as actually incurred, including increases during the life of the contract. The Assistant Secretary (Administration) and that official's staff office directors each receive a copy of the MATS updated reports monthly for complete coordination. Additionally, each bureau head receives a copy of the report for information. Also, through the computerized Federal Procurement Data System, data can be provided to the Office of Budget and Program Analysis for that office's use in the budget planning process.

We feel this a major step toward improving the monitoring of all major acquisitions.

The Treasury Department is requesting multi-year authority in the FY 1983 budget to fund major Internal Revenue Service data process equipment purchases. With this authority we will be better able to monitor the progress of the major acquisition project to insure that there is no schedule slippage or cost growth.

6.) How are your agency's major acquisition projects funded? Through annual appropriation bills? Are funds available to your agency for major acquisitions all spent in later years as well?

Response: The Bureau of Engraving and Printing is on a revolving fund. The majority of their work is paid for by the Federal Reserve System and the Postal Service. Additionally, the Comptroller of the Currency receives its money through the assessments of the national banks. Our other bureaus receive annual appropriations and are limited to obligating funds on an annual basis.

7.) How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

Response: The Department of the Treasury does not issue specific reports about the status of its major acquisitions. The Department has very few contracts which meet the $50 million threshold proposed for "major acquisitions." Such procurements would normally be reported to the Congress as part of the budget process and would be discussed with the Senate and House of Representatives Budget committees during the Departmental budget hearings.

8.) What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

Response: Since the Department of the Treasury would anticipate very few acquisitions which meet the proposed threshold, the bill would have minimal impact on Departmental operations. We question whether the process as outlined is required. We believe that this bill would impose an unnecessary reporting burden on Executive Branch agencies. The same result would be achieved by requiring agencies with major acquisitions to report on them as part of the Congressional budget process.

General Services Administration
Office of Acquisition Policy
Washington, DC 20405

MAY 21 1982

Honorable William V. Roth, Jr.
Chairman, Committee on
Governmental Affairs
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

This is an interim reply to your letter of May 6, 1982, which referenced the General Accounting Office Report, "Status of Major Acquisitions as of September 30, 1981," and requested responses to specific questions on major acquisition projects in this Agency.

Because of the depth of the questions that you have asked, we, regretfully, cannot provide a complete response in the time requested. We are in the process of preparing a detailed response to each of your questions. Information will be provided on this Agency's controls over major acquisition projects including those of our Central Office, the program managers and our eleven Regions. We will provide you a final reply by June 20, 1982.

If you have any questions, please contact me on 566-1043.

Sincerely,

WILLIAM B. FERGUSON
Acting Assistant Administrator
for Acquisition Policy

General
Services
Administration

Washington, DC 20405

JUL 1 1982

Honorable William V. Roth, Jr.
Chairman
Committee on Governmental Affairs
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This is in response to your letter of May 6, 1982, in which you requested the General Services Administration's (GSA) response to certain questions relating to Senate Bill S.2397 and controlling the cost growth of major acquisitions. We enclose our specific responses to the questions raised and offer the following general comments.

Although GSA has numerous and varied contracting activities, the majority of GSA purchases for itself and for other agencies involve the acquisition of commercial items and services. The bulk of these procurements are made under fixed price contracts where the Government's requirements are known and clearly specified. Consequently, GSA has few acquisitions which present a significant potential for cost growth of the type referred to in your letter and in the recent General Accounting Office (GAO) report on this subject. The agency has even fewer acquisitions that would meet the $50 million threshold used by GAO in its study of cost growth in major acquisitions.

The GAO report referred to in your letter identified five GSA acquisitions meeting GAO's major acquisition criteria. All of these acquisitions involved the construction of public buildings by GSA's Public Buildings Service. With certain possible exceptions, such as commodity acquisitions for GSA's stockpile of strategic and critical materials, construction projects are the only GSA procurements likely to exceed the $50 million threshold. Accordingly, our enclosed responses to your questions relate primarily to GSA's major acquisitions involving construction.

In our view, cost growth in GSA major acquisitions is not a significant problem for the agency. The GAO report shows that there was minor cost growth in only one of the GSA construction projects reviewed. Furthermore, as detailed in the enclosure, the agency is subject to a number of statutory and administrative mechanisms that serve to control cost growth. Additionally, GSA already provides Congressional oversight committees with extensive information regarding these major acquisitions.

We will be pleased to provide any additional information you require.

Sincerely,

Ray Kline
Deputy Administrator

Enclosure

General Services Administration
Responses to Questions
Submitted by Chairman Roth

Question 1: The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

Response: Major acquisitions involving construction are recorded in GSA's Public Buildings Service Information System. The system provides information relating to the cost, scheduling, and status of GSA construction projects. The system is centrally maintained, and is updated on a monthly basis.

Question 2: Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

Response: See response in answer to Question 1.

Question 3: How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

Response: GAO's letter requesting data was dated August 14, 1981, and asked for a response by November 1, 1981. GSA responded on November 13, 1981. To the best of our knowledge all of the information requested was furnished to GAO. We had little difficulty in obtaining the desired information.

Question 4: The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

Response: We do not consider cost growth to be a significant problem in GSA for either major acquisition projects or procurements involving lesser amounts of money.

Because of the nature of GSA's acquisitions and the procurement methods used by the agency to acquire property and services for the government, there is relatively minor potential for serious cost growth problems regardless of the cost of the acquisition. In our view, such problems are more closely identified to acquisitions involving less well defined requirements, such as in research and development efforts and complex systems procurements.

To the extent that there has been some cost growth in acquisitions involving construction, such growth is usually attributable to a change in the scope of the project. In the case of the Metro West Project, the only instance of GSA acquisition cost growth cited in GAO's report, the increased costs were a result of a delay of several months, while Congress considered a proposal to change the project site. The 6% cost increase in that project was due to the effect of inflation on the construction industry during this period.

With respect to GSA construction projects, the Public Buildings Act of 1959, 40 U.S.C. 606-616, requires Congressional authorization for GSA to expend in excess of 10% of the estimated maximum project cost. See our response to Question 7 for more detail as to existing statutory controls on GSA construction projects.

Even though there is some potential for commodity acquisitions for GSA's stockpile of strategic and critical materials to exceed the $50 million major acquisition threshold, the acquisitions present little opportunity for cost growth. Stockpile procurements are funded by annual appropriations and contracts are awarded on a fixed price basis. There has been no history of cost growth in these procurements.

Question 5: Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

Response: The cost growth controls already built into the Public Buildings Act of 1959 present an effective Congressional and management control over cost growth in our construction projects. Additionally, we have instituted a further internal control over modifications to construction contracts (as well as certain other contracts) after they are awarded, to ensure that any changes to contracts are necessary and reasonable. Specifically, GSA has established Contract Modification Review Boards to limit the use of contract modifications and the cost increases that may result from such changes.

Question 6: How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?

Response: Presently, GSA's major acquisition projects involving construction are funded in one of two ways. First, Congress may appropriate specific monies for a given project on a "line item" basis during the annual GSA budget process. These are "no-year" funds available for expenditure during the life of the projects. Second, a project may be funded through a Transfer Allocation Account. In this latter case, Congress appropriates funds to the benefiting agency, which, in turn, transfers the project funds on a non-expenditure basis through the Department of Treasury to GSA. In both cases, monies are ultimately obligated out of the Federal Buildings Fund established by section 210 of the Federal Property and Administrative Services Act of 1959, as amended, 41 U.S.C. 490.

Question 7: How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

Response: Congress is kept informed of the nature and status of GSA major acquisition construction projects throughout the acquisition cycle. The Public Buildings Act of 1959, 40 U.S.C.606, provides that prior to receiving an appropriation for the construction of a public building involving a total expenditure in excess of $500,000, the project must be authorized by the Senate Committee on Environment and Public Works and the House Committee on Public Works and Transportation. In order to secure Congressional approval, GSA must submit to Congress a prospectus of the proposed facility which includes a variety of detailed information concerning the proposed project including an estimate of its maximum cost. This procedure is also followed in the case of building leases, purchases, and alterations.

Once the project has been authorized and funds made available for the acquisition, GSA may increase the estimated maximum cost by an amount equal to the percentage increase, if any, of construction costs from the date of transmittal of the prospectus to Congress. However, in no event may the increase exceed 10% of the estimated maximum cost without Congressional authorization.

Section 11(a) of the Public Buildings Act of 1959, 40 U.S.C. 610, further requires GSA to submit an annual report to Congress indicating the costs, location, space, and general status of each acquisition covered by the statute, including major acquisitions involving construction. The report is submitted to the President of the Senate and the Speaker of the House, as well as to various Congressional committees. Additionally, where the acquisition involves construction of a new building, GSA is required to notify the Senate Committee on Environment and Public Works 30 days prior to the award of the initial construction contract.

The Strategic and Critical Materials Stockpiling Act requires GSA to provide Congress a report of its activities under the Act every six months. The report includes information on all stockpile acquisitions. The report is sent to the President of the Senate and the Speaker of the House. Copies are provided to the Office of Management and Budget and other interested agencies.

Question 8: What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

Response: S.2397 would require the enactment of special legislation to continue the expenditure or obligation of funds on any civil acquisition the estimated cost of which is in excess of $50 million, whenever the cost of the acquisition will exceed by 25% the original acquisition estimate as presented to Congress. The bill would also require a quarterly report on the status of major civil acquisitions to be submitted to Congress through the Office of Management and Budget in accordance with policies and procedures established by OMB.

As previously noted, with respect to construction and other buildings acquisition projects, there are already existing statutory controls over major GSA acquisitions relating to project authorization, cost growth, and status. These controls are, in many respects, more restrictive than the proposed legislation. We therefore, question whether the legislation will constructively add to Congressional oversight of GSA's major acquisitions.

We do not object to the oversight role proposed for OMB, although direct agency reports to Congressional oversight committees may be more efficient and responsive to the information needs of the individual committees.

NASA
National Aeronautics and
Space Administration

Washington, D.C.
20546

Reply to Attn of C:MAM:tsc:C7142f

JUL 2 1982

Honorable William V. Roth, Jr.
Chairman
Committee on Governmental Affairs
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

This is in further reply to your request for the comments of the National Aeronautics and Space Administration on the bill S. 2397, "To require (1) the enactment of special legislation to continue the expenditure or obligation of funds on any major civil acquisition initiated after January 1, 1982, whenever the cost of such acquisition has increased or, on the basis of estimates, will increase over the initial estimate when the project was justified to the Congress by 25 per centum or more, and (2) reporting of status information on all major civil acquisition."

S. 2397 would establish a process by which the Office of Management and Budget (OMB) would determine the cost growth on any "major civil acquisition", which would include Federally financed construction, acquisition or procurement, the cost of which exceeds $50 million. Upon an OMB determination that the actual or projected cost of a "major civil acquisition" results in a cost growth of 25 per centum or more compared to the initial estimate, excluding the affect of inflation, the bill would proscribe the obligation or expenditure of additional funds for such acquisition until specific authorizing legislation is enacted by the Congress.

The National Aeronautics and Space Administration opposes the enactment of this legislation. While the intent of the bill is to give Congress greater control over those major acquisitions which develop significant cost overruns, we believe that the process proposed in the bill has the potential for contributing to such growth. For example, under the potential threat of immediate project cancellation due to cost growth, an agency and its contractor may revert to extreme caution and seek to establish the highest possible baselines. Then as the project progresses, because of the nature of technical development, there would inevitably be the tendency for the contractor involved to add changes and improvements that fit within the total available funds in the inflated baseline. Despite the best efforts of the Agency to control this situation, the result would most likely be projects costing more than they should. This would then

either increase total budget levels or force the absorption of the higher costs in such nonproject areas as basic research and supporting technology, which is a problem already experienced by research agencies.

In cases where work is actually suspended, the Government would still be liable for costs resulting from stop-work orders, contract terminations, standby costs, and subsequent re-starts, where applicable. Also, no matter how temporary the impact of the suspension (and enacting a bill on a cost overrun may not be a speedy process), the abrupt stop-and-go nature of the procedure could have a devasting effect and ultimately lead to still greater increases in total costs. If the stoppage is prolonged, the contractor, in order to minimize his costs, may be required to adjust his workforce, which could result in the reassignment or loss of project personnel, or shut down essential production lines. In such a case, the program schedule would be further delayed by the time required to reassemble the workforce or to re-establish the production line.

There are other ways the bill could disrupt agency programs. One scenario is that an overrun notice given for a single procurement could jeopardize an entire program, which in total would be within the 25 percent limit. Another example would be a situation where the projected overrun would not occur for a year or more. In such a case, a cost growth notice required by the bill would stop expenditures without an opportunity to take corrective action to prevent the projected overrun.

We also are concerned that the proposed requirements in section 2 of the bill for quarterly reports on the cost growth and status of acquisitions will add significantly to the paperwork burden of the agencies without providing sufficiently useful data. Furthermore, we question whether the substantial amount of data that would be generated by these reporting requirements could be analyzed effectively in order to form the basis for program decision-making as intended by the bill.

If this legislation is to be considered further, we also would question the lack of clear definition of certain terms used in the bill. For example, the definition of "major civil acquisition" in section 1, paragraph 1, of the bill is ambiguous as to what types of acquisitions would be subject to the provisions of the bill. Although the term specifies "civil" acquisitions, the definition of the term pertains generally to the use of Federal funds, and, thus, is not restricted to civil procurements or agencies.

Another area of concern relates to the term "cost growth". In section 3(b) of the bill, only the amount attributable to inflation is excluded from the determination of cost growth. Under a strict interpretation, costs allowable to major changes outside the scope of the program (such as extending a mission or procuring additional

spacecraft) would be part of cost growth for purposes of the bill. It is considered that for such changes in scope authorized in the Congressional budget process, the bill establishes an unnecessary control mechanism.

We also do not believe that the concept of designating a single point in time for determining baselines for projects, as embodied in the definitions of "initial estimate" in section 1, paragraphs 2(a) and (b), is appropriate for dynamic research and development projects such as those in NASA. Such projects are characterized by technical complexity and risk, technical changes to a baseline approach or design and the potential for application of new technologies to the project, all of which can change baseline costs significantly at various times in the development of the project.

Finally, it is felt that NASA has adequate controls to reduce cost growth on major acquisitions and to assure prompt Congressional notification of changes to them. This is evidenced by our Master Buy Plan procedures providing for NASA management oversight of selected NASA center procurements; the procedures followed by NASA pursuant to OMB Circular A-109, "Major System Acquisitions", governing major procurements over $100 million; and implementation of NASA study recommendations to improve NASA's program management of the Space Shuttle and other programs. In addition, we submit semi-annual Project Status Reports on all major NASA flight projects under an arrangement with the Senate Committee on Appropriations, Subcommittee on HUD-Independent Agencies; provide data to the General Accounting Office for their annual Major Acquisition Report; in response to questions, report annually to the House Committee on Science and Technology, Subcommittee on Space Science and Applications, the updated total estimated cost of each major NASA project; and furnish detailed information on all NASA acquisitions to the Congress in connection with the annual budget process. We believe these controls provide sufficient visibility of our major programs to satisfy the purpose of this bill.

For the foregoing reasons, NASA opposes S. 2397.

The Office of Management and Budget has advised that, from the standpoint of the Administration's program, there is no objection to the submission of this report to the Congress.

Sincerely,

John F. Murphy
Assistant Administrator
for Legislative Affairs

NASA

National Aeronautics and
Space Administration

Washington, D.C.
20546

Reply to Attn of C:MAM:tsc:C7142f

MAY 26 1982

Honorable William V. Roth, Jr.
Chairman
Committee on Governmental Affairs
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

This letter responds to your letter of May 6, 1982, requesting NASA's responses to certain questions concerning major acquisitions, the report of the General Accounting Office (GAO) entitled "Status of Major Acquisitions as of September 30, 1981", and S. 2397, identified as the "Cost Reduction in Major Procurements Act".

We are pleased to forward herewith our responses to the questions in your letter. For the purpose of clarity, each question has been repeated, followed by our response.

We would like to make note of an error by GAO in its report, "Status of Major Acquisitions as of September 30, 1981". In Appendix I, "Status and Cost Growth, Major Federal Acquisitions as of September 30, 1981", on page 57 of the report, GAO erroneously included Space Transportation System (Space Shuttle design, development, test and evaluation) figures twice. NASA had supplied GAO with Space Transportation System (Space Shuttle) figures in both real year dollars (the 9927.0 figure) and in FY 1971 dollars (the 6661.0 figure). GAO erroneously posted these figures in Appendix I under two projects, instead of one, by designating the 9927.0 figure for the Space Transportation System and the 6661.0 figure for Space Shuttle. In so doing, GAO has produced inaccurate overall NASA cost and cost growth figures. We will bring this error to the attention of GAO.

If we can be of further assistance, please do not hesitate to call on us.

Sincerely,

John F. Murphy
Assistant Administrator
for Legislative Affairs

Enclosures

NASA's RESPONSES TO QUESTIONS
IN CHAIRMAN ROTH'S LETTER OF MAY 6, 1982

Question #1: The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

Response: NASA has an agency-wide system for regularly reporting on the cost, schedule and technical status of individual major acquisitions. An important feature of this system is the monthly General Management Status Review (GMSR), which is a forum composed of senior NASA management officials providing an opportunity for heads of major offices to report on the status of programs and activities, issues, problems and policy questions. The information and data presented at the GMSR meeting is subsequently made part of a report which is published for internal agency use after each meeting. The GMSR meetings and report are complemented by NASA's Financial and Contractual Status (FACS) system. Included in the data of this system is information on contract value, project title, contractor, contracts awarded by each NASA installation or by State and city of performance, and contract description. Other agency sources of data related to major acquisitions are the annual internal agency budget process, periodic Program Operating Plan submissions, periodic contractor reports, and team review of individual projects.

Question #2: Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

Response: NASA maintains a central source of summary data related to individual major acquisitions at NASA Headquarters. More detailed data are maintained at NASA's field installations.

Question #3: How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

Response: GAO requested data for its annual report to the Congress on the "Financial Status of Major Federal Acquisitions" in a letter to NASA dated August 14, 1981. This data was used in the GAO report, "Status of Major Acquisitions". In its August 14, 1981 letter, GAO requested that NASA supply information to complete major acquisition

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data schedules for projects previously reported, as well as for projects being reported for the first time. Additionally, GAO requested the completion of seven data documents in an "Addendum to Data Request" on funding, schedule milestones and quantities. NASA submitted the information requested by GAO on December 15, 1981, in the following manner:

. all information on the GAO data schedules for new and previously reported projects was supplied;

. all information in data elements 1 through 4 of the GAO "Addendum to Data Request" was supplied;

. NASA did not supply information for data element 5 of the "Addendum to Data Request", relating to "Funding Data", because the information requested therein either duplicated information in previous data elements or was not applicable to NASA;

. NASA did not supply information for data element 6 of the "Addendum to Data Request", relating to "Project Schedule Status", because although requested by NASA on several occasions, GAO was unable or unwilling to provide objective definitions of the various timing and cost terms used in the data element;

. data element 7 of the "Addendum to Data Request", relating to "Quantity Data", was not applicable to NASA and, therefore, was not completed.

Question #4: The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

Response: NASA's major acquisitions are generally of a long-term research and development, high-technology type, which are high risk activities by their very nature. Nevertheless, the agency makes a concerted effort, prior to project implementation, to define the objectives and technical plan, to establish realistic schedules, and to develop reasonable cost estimates. Once a project is underway, its progress is monitored closely, both in the field and at Headquarters. While most of our projects have been completed within established cost ranges, the general problem of containing cost growth is inherent in high-risk research projects. Some NASA projects have experienced cost growth that could not be contained and which could be considered excessive.

Reasons for cost growth on NASA projects are many. Some of the factors involved are beyond the control of the agency, such as high inflation rates, delays or reductions in appropriations, and shortages of skilled labor. Others are clearly the responsibility of management. Among the latter factors are: changes in technical

requirements, overly-optimistic schedules, underestimates in degree of difficulty of tasks, miscalculation of competitive market conditions, inadequate contractual incentives, and miscalculation of the availability of future technology.

Question #5: Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

Response: NASA has stressed cost control for many years. In 1980 and 1981, a renewed effort was undertaken to assess project management in NASA. A Project Management Study was initiated to identify generic reasons which aggravate costs and schedule growth, and to recommend appropriate actions by NASA. The study has been completed. A description of the study's findings and recommendations is included in the attached April 27, 1981 statement of Dr. Donald P. Hearth, Director, Langley Research Center, NASA, to the Senate Subcommittee on Science, Technology and Space, Committee on Commerce, Science and Transportation. Implementation of the study's recommendations is underway. In addition, the NASA Handbook, "Principles of Project Management", has been issued (a copy of which is attached). Other instructions and guidelines dealing with the administrative process also are being revised and strengthened.

Question #6: How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?

Response: Funding of NASA major R&D acquisitions is by annual authorization and appropriation. The Research and Development appropriation is available for obligation for a period of two years; essentially all funds are expended within the first three years of each appropriation.

Question #7: How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

Response: NASA informs the Congress about the status of its major acquisitions by several means, including the following:

. all NASA authorization and appropriations subcommittees receive NASA annual budget justifications, and hold hearings, in which project status is presented. Cost and schedule data are provided for the record to the House Committee on Science and Technology, Subcommittee on Space Science and Applications, and usually to other committees.

. NASA provides data to the GAO for its annual Major Acquisition Report, which is widely distributed by the GAO.

. NASA provides Project Status Reports semiannually to the Senate Committee on Appropriations, Subcommittee on HUD-Independent Agencies, covering major projects. Copies of these reports are made available to other committees, as well.

Question #8: What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

Response: In response to this question, we have prepared a draft report setting forth NASA's views on S. 2397, and, as required by Office of Management and Budget (OMB) Circular A-19, "Legislative Coordination and Clearance", have submitted the draft report to OMB for their advice on its relationship to the program of the President. As soon as OMB clears our draft report, we will forward it to the Committee.

NHB 7120.2

Principles of Project Management

JANUARY 1982

NASA
National Aeronautics and
Space Administration

January 1982

FOREWORD

A NASA project is a defined, time-limited activity with clearly established objectives and boundary conditions executed to gain knowledge, create a capability, or provide a service. The basic principles of project management do not change, but it behooves us from time to time to restate these invariants and our adherence to them. I have documented a current version of these principles and am publishing them as my expression of the ground rules and guidelines we should remember as we carry out our research, development, construction, or operational assignments.

James M. Beggs
Administrator

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PRINCIPLES OF PROJECT MANAGEMENT

1. NASA welcomes and accepts the high challenge of carrying out projects, expeditiously and at minimum cost, that demand advances in technology.

2. While high risk is inherent in the work done by NASA, every effort will be made to understand and quantify this risk before seeking Office of Management and Budget and Congressional commitment to a project. The desire to obtain project approval or to proceed with project implementation should not be permitted to interfere with the adequate and comprehensive studies and cost analyses necessary to define the risk so as to minimize the potential for cost overruns and schedule slips.

3. The Project Manager is the key individual charged with project execution. After project approval, he or she will have authority and responsibility for all project decisions and will make all recommendations to the management structure required for higher level decisions.

4. The life of a project extends from the earliest possible date during the definition phase until all relevant activities have been completed, including the provision of data in final useful form. The Project Manager will be appointed as early in this cycle as possible and will be expected to remain with the project until its completion. It is intended that the position of Project Manager is at such a level that it will be aspired to as a career goal and that incumbents of these positions will normally remain in them for extended time periods. Project management experience is a key element in career progression in line management.

5. The selection and appointment of a Project Manager are among the most important functions of a Center Director, since the Project Manager will have the authority and responsibility to execute the Center Director's contract with the Program Associate Administrator and higher management. Appointment should be made only after in-depth discussions between the Center Director and the Project Manager, during which they shall establish a clear understanding of the conditions under which the project is to be implemented and the resources that are to be provided.

6. The Program Associate Administrators are accountable to the Office of the Administrator for assuring that new projects have been adequately defined before being included in the Agency's budget submission. Structuring and focusing the definition phase of any project should reduce the total lead time between concept and flight. Major new projects are normally selected by the responsible Program Associate Administrators in consultation with the appropriate Center Directors. Major projects will normally include these three documentation phases:

- A formal "Definition Review" will be conducted by a non-advocate team selected by and reporting to the Program Associate Administrator. The review will be designed to assess the actual stage of project definition in terms of the clarity of the objectives; the completeness of technical specifications; and the range of technical, cost, and schedule risks involved. Results of the Definition Review for major projects are an essential element in the decisions as to the Agency's readiness to provide external commitments on project cost/schedule/performance. The quality of the internal technical and resource commitments remains the responsibility of the Project Management Center Director.

- A signed "Project Initiation Agreement" between the Program Associate Administrator and the involved Center Directors, also required for major projects before inclusion in the Agency budget submission, will outline the management and technical interfaces, the procurement and/or in-house acquisition plans, the schedules, the resource estimates, the uncertainty/contingency/reserve envelope, and all other key ground rules.

- A formal, approved "Project Plan" will be required to reconfirm intra-agency understandings before release of resources by the Program Associate Administrator to the Project Management Center.

7. The Project Manager's authority follows a clear chain of delegation that starts with the Project Approval Document, the agreement between the Administrator and the Program Associate Administrator that reflects the NASA commitment to the Administration. The agreement between the Associate Administrator and

the Center Director is reflected first in the Project Initiation Agreement and later in the Project Plan. The Project Manager is delegated authority to carry out the Center Director's responsibility for project implementation. This authority is further defined by agreements between these two individuals established prior to the appointment of the Project Manager and updated as required.

8. A Project Manager is responsible for a level of understanding of contractor activities and resource use sufficient to control the project activity. The specific approaches to be employed will be individually developed as part of the Definition Phase, the Project Initiation Agreement, the Project Plan, the Request for Proposal, and the ultimate contract.

9. The Project Manager, through the immediately surrounding institution, must have direct control of the systems engineering function and resources. Usually, therefore, a single Center will be selected by the responsible Program Associate Administrator as the Project Management Center, and its major responsibilities and interfaces will be initially defined in the "Project Initiation Agreement"; this will usually include delegation for suballocations of NASA resources to other Centers and instrumentalities. In cases where large and complex programs require the utilization of major resources of multiple centers, the program management and system level requirements and integration responsibilities may be established at the Headquarters level by the Administrator.

10. The selection of a responsible contractor and the management of the efforts to be accomplished are critical to the success of NASA programs and will be guided by the following:

- Project, line, and staff management must take an active role in structuring appropriate individual procurement plans, work statements, and solicitation provisions, especially the formulation of clear evaluation criteria. Vigorous monitoring of procurement structures set in place is mandatory.

- In structuring evaluation criteria for individual procurements, and during the evaluation process, greater consideration must be given to human and material resource proposals in the evaluation of mission suitability elements. Unrealistic resource proposals will be considered to reflect a lack of understanding of the requirement. This will result in a lower mission suitability evaluation.

- NASA Source Selection Officials must be attentive to the credibility, or lack thereof, of resource and cost proposals in selecting contractors. Selections should not necessarily be made on the basis of lowest cost when there is reason to believe the resource requirements are understated by the proposer.

- Assessment of the experience and past performance of competitors for NASA projects continues to be a significant component part of the proposal evaluation process: in-depth analysis of these elements must be made by NASA evaluators and Source Selection Officials alike. Selection of demonstrated poor prior performers, or those lacking meaningful experience reasonably relatable to particular requirements, is discouraged and not in the overall best interest of the Government in the absence of other compelling reasons.

- Contracts awarded to successful competitors should, to the extent feasible, accurately reflect technical and cost baselines representative of the scope of work to be performed free from proposal deficiencies and weaknesses identified during the evaluation process.

11. After contract award, it is essential that the Project Manager develop control of the detailed technical content of the selected contractual approach, together with associated costs, before the contract effort reaches full momentum. To this end, the early part of a contract period of performance shall be devoted to developing such control and assessing whether the project needs to be realigned or whether the project content and estimated costs can be achieved. This post-award activity will usually be funded at a moderately low level prior to a large-scale commitment of funds. Further assessments of technical content and its compatibility to planned resources must be made periodically as the work progresses.

Project Managers are responsible for informing NASA management of the result of these assessments in a timely manner. Center Directors are responsible for the implementation and monitoring of this process.

12. Explicit provision will be made in all new start proposals for development uncertainties and changes in scope that may be required. Development uncertainties will be covered by a "contingency" estimate which should provide for:

- Normal engineering changes
- Cost allowance for impact of schedule slips at the subsystem level
- Anticipated inheritance not realized
- Anticipated increases in technical or management complexity
- Alternate design paths/backup vendors where appropriate to mitigate schedule risk
- Known factors whose cost impact is uncertain (e.g., TBD specifications)

These uncertainties can be assessed by utilizing any one or more of the following approaches:

- Technical and schedule risk assessment (e.g., critical path analysis)
- Parametric cost estimating (using empirical data bases)
- Cost risk analysis
- Engineering judgment
- Analogy with previous programs

In addition to these basic project requirements for a contingency to cover development uncertainties, specific provision should be made in the final estimates for a Headquarters reserve to include funding for significant changes in ground rules and assumptions, additional requirements beyond the original objectives established for the project, and schedule slips outside the influence of the project. An allowance for program adjustment (APA) will be established to fund such changes. The contingency should be allocated to the Project Management Center. APA will be maintained in Headquarters until specific requirements are identified, reviewed, and confirmed when appropriate amounts will be transferred to the Center.

NASA
National Aeronautics and
Space Administration

Hold for Release Until
Presented by Witness

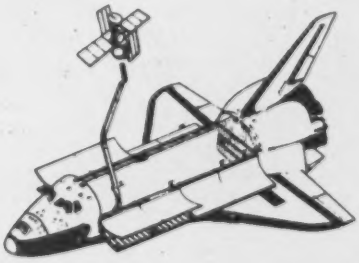
APRIL 27, 1981

Subcommittee on Science, Technology and Space
Committee on Commerce, Science and Transportation

United States Senate

Statement by:

DR. DONALD P. HEARTH
DIRECTOR
LANGLEY RESEARCH CENTER



97th Congress

Statement of

Dr. Donald P. Hearth
Director
Langley Research Center

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

before the

Subcommittee on Science, Technology and Space
Committee on Commerce, Science and Transportation
United States Senate

Mr. Chairman and Members of the Subcommittee:

It is a pleasure for me to review for the Subcommittee the results of the Study on NASA Project Management, of which I was the study leader.

Study Background

Last October, Dr. Alan Lovelace (at the time, NASA's Deputy Administrator) directed me to form a small NASA team to conduct a study of NASA Project Management. Dr. Lovelace established the following objectives for the Study:

(1) To assess project management in NASA with emphasis on identifying generic reasons that aggravate cost and schedule growth of NASA projects.

(2) To recommend appropriate NASA actions to deal with the generic reasons.

He also established the following groundrules for the Study:

(1) The Study Team should consider all types of projects within NASA, with the exception of the development of the Space Transportation System (which had been reviewed extensively in 1979).

(2) The Study Team should consider all aspects of project management including those actions by NASA management which influence project management performance.

(3) The Study Team should not investigate in depth any individual project; i.e., the Study's purpose was to identify generic factors, and was not to identify the cost management performance of any particular project.

As I will indicate, the Team talked with many people, inside and outside of NASA. Some of those individuals have been associated with projects that have experienced large cost growth. All of the individuals were extremely open and candid, and told us a great deal in confidence. Because of this, we were able to identify the major generic factors that aggravate cost growth of NASA projects. However, it is because of this, and the fact that we did not conduct a detailed, exhaustive audit of any projects that I must ask you to accept a groundrule which the Study Team adopted for itself, and has strictly adhered to in all of our presentations of our Study results. Namely, that we will not discuss the performance of individual projects.

Before discussing the Study results, I will briefly summarize the composition of the Study Team and how we performed the Study. When Dr. Lovelace and I discussed this assignment last October, we recognized that the results would have to be based primarily upon the judgment of the Study Team members since the task did not lend itself to quantitative analysis. Consequently, team members were selected who have broad experience in Project or Program Management within NASA. The Team was an excellent group of people, and exhibited the sound judgment and insight required.

Our initial activity was to interview a large number of NASA managers. These included NASA's Comptroller, Chief Engineer, most of the Program Associate Administrators and Center Directors, and about 20 to 30 NASA Project Managers. The purpose of these interviews was to identify those project management factors that the managers believe are important today, and how the factors may have changed in the last 10 to 15 years. When combined with the Team members' initial views, these interviews provided a "menu" of factors to examine later in the Study. At the same time, we gathered performance data for the NASA projects implemented during the past 22 years. From these data, we selected 13 specific projects that we examined in some detail. This group of projects was representative of all of those projects conducted by NASA since 1958--they were implemented during different time periods; experienced a large range of cost growth (from 0% to over 100%); were various types of projects (space flight, aeronautics, construction of facilities); and were implemented by different NASA Program Offices, Field Centers, and Contractors. We examined each of these projects by reviewing project documentation, and by also meeting with the Program Offices in NASA Headquarters, the Project Offices in the NASA Field Centers, and with the key Contractors.

From this phase of the Study, the Team identified a number of generic factors which appeared to have significantly influenced (either in a positive or a negative way) the cost and schedule performance of several NASA projects. This led to a set of Tentative Conclusions and Recommendations. These were then "tested" in that we re-examined each of the representative projects and examined an additional 10 to 15 projects. We pursued the question, "What would have happened if the Tentative Recommendations had been in place at the time the project was implemented?" This resulted in several changes to the tentative results, and, finally, led to the results that I will discuss today.

During the Study, we also reviewed the experience of the Department of Defense. In addition, we reviewed reports of the General Accounting Office which summarize the cost experience of almost a trillion dollars worth of government projects.

Study Results

The results of the Study were agreed to unanimously by the Study Team in mid-January 1981, and presented to NASA management on January 21, 1981. The following general comments are viewed by the Study Team as an important introduction to the specific Conclusions and Recommendations.

Throughout its 22-year history, NASA has undertaken technically-advanced projects. By their very nature, these projects incorporate high levels of technical, financial, and schedule risk. Historically, NASA's overall project management performance has been good; project successes have been very high, and cost performance has, generally, been good compared to other organizations engaged in technically-advanced projects.

NASA's cost management in the last decade has improved over the 1960's. However, the advent of constrained budgets in the 1970's has forced even tighter fiscal management. In this environment, the Office of Management and Budget, and the Congress treat early cost estimates as firm commitments and significant cost growth is not tolerated. During recent years, several projects have experienced major cost increases without apparent forewarning. This has damaged NASA's credibility and reputation for successful project management. Actions by NASA management are, therefore, necessary; particularly, in light of NASA's external environment and the pressures on government budgets.

The Study Team verified, from its examination of a group of representative projects, that the cost performance of a project is closely related to the application of sound project management principles and/or the use of available management tools.

Therefore, the Study Team's Conclusions and Recommendations are not intended to suggest the superpositon of either an additional hierarchy of management, or the addition of new management tools within the current NASA system. Rather, they stress the need for continuing application of the basic principles of sound project management by NASA, refinement of existing management tools, and the continuing verification, by NASA's top management, that the principles are being followed and available tools are being used.

One final observation before discussing the specific Conclusions and Recommendations--good people are the key to good project management. Sound project planning, management practices, and source selection approaches are all important. However, they cannot substitute for having high quality, and highly-motivated people responsible for project management; both inside and outside of government.

The Study Team's Conclusions and Recommendations are as follows:

Conclusion 1:

The following have been significant contributors to cost and schedule growth of several NASA projects:

a) Technical complexity of the projects.

b) Inadequate definition, prior to the NASA decision to proceed with project implementation, and the Agency's commitment to the OMB and the Congress, including:

- Limited advanced technology development and inadequate definition of the technical, cost, and schedule requirements for the project to be implemented. Current NASA policy does not require pre-project Analysis and Definition (Phases A and B).

- Over-optimism, in terms of the cost and schedule requirements for new projects, resulting from NASA's internal project advocacy process during the budget cycle.

- Inadequate evaluation of the project's technical complexity and risks leading to either insufficient or inappropriate reserves (fiscal, schedule, and technical).

c) NASA's tendency to select the low bidder in the competitive acquisition process used for major system development. This is recognized by industry and can have an adverse effect on the project's performance when artificially-low bids are accepted by NASA and used to rationalize low completion costs and annual funding requirements.

d) Poor tracking of contractor accomplishments against approved plans in a timely fashion, leading to late identification of problems.

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Conclusion 2:

The following have been significant contributors to good cost and schedule performance of several NASA projects:

a) The function of the NASA Project Manager. The most important individual in the NASA project management process is the Project Manager. The role of the Project Manager was well defined in NASA's General Management Instruction 4-1-1. As noted therein, the Project Manager must have authority commensurate with his responsibility and must have the flexibility to make tradeoff decisions between performance, risk, cost, and schedule. In turn, he must be held accountable for his performance.

b) Adequate definition of the project to be implemented prior to the NASA decision to proceed with the project and the Agency's commitment to OMB and the Congress.

c) Proper planning and management of project contingencies, including:

- Establishment of contingencies on the basis of assessed technical complexity and risk of the various elements of the project.
- Forecasting the commitment of contingencies on the basis of development and expenditure plans.
- Tracking contingency requirements.

d) Early understanding between NASA and the implementing contractor(s) of the project's scope, implementation plans, and interfaces.

e) Good implementation of the project by the NASA project management team and the contractor(s).

Conclusion 3:

The following apparently have not had a significant effect on cost and schedule growth of several NASA projects:

a) The inability to make initial cost estimates (assuming a good definition of the project), within an accuracy of about 30 percent.

b) Non-utilization of classified technology

c) Excessive influence of the "user" communities of NASA projects.

Conclusion 4:

During the late 1970's, the Nation experienced sustained periods of high inflation. It is difficult to isolate the quantitative effect of inflation on NASA projects during this period; however, it is clear that actual inflation exceeded predicted rates and contributed to the cost growth experienced in this timeframe.

Conclusion 5:

NASA uses many terms and definitions to describe monies budgeted for unexpected changes: "APA," "reserve," "contingency," etc. In addition, there is no consistency, within NASA, in the application of this management tool.

Conclusion 6:

Some NASA space projects have experienced cost growth in the development and implementation of their ground segments and the integration of the ground and space segments. This has been due to lack of understanding of the overall design complexity and the maturity of the overall project definition prior to implementation. This is particularly evident in high data volume projects.

Conclusion 7:

In some cases, the management of technically-complex projects has been assigned to multiple NASA Centers without proper consideration of each Center's capability or of the management and technical relationships between the Centers. The management problems and intercenter friction resulting from such a situation can contribute to cost growth.

Conclusion 8:

A project will experience increased technical, schedule, and cost risk when it is dependent on the parallel development of critical supporting project systems that are outside of the Project Manager's authority.

Conclusion 9:

The following were observed in the Study and are of concern for the future.

- The shift of emphasis in industry away from NASA work toward commercial endeavors and defense-related work. This situation suggests that future project planning should consider industrial workload, productivity, capability, interest in NASA contracts, and other management factors.

- The composition of the NASA workforce in terms of its age distribution. There is an incipient "generation gap" that will, in the future, cause shortages in strong candidates for project management positions.

As a result of these Conclusions, the Study Team adopted the following Recommendations:

Recommendation 1:

NASA should continue to pursue technically-advanced projects and expect cost growth in some of its projects in the future.

Recommendation 2:

Existing policies for project planning and definition activities, as well as their review (prior to the Agency decision to request funds for project implementation), should be strengthened. Specifically:

a) NASA Management Instructions should incorporate the requirements for pre-project Analysis and Definition (Phases A and B).

b) Sufficient funding for definition should be included in NASA budgets, starting in Fiscal Year 1983, in order to insure thorough definition of future projects.

c) A formal "Definition Review" should be conducted prior to inclusion of the project for implementation in NASA budget requests starting in Fiscal Year 1983. This review will be established by, and report to, the appropriate Program Associate Administrator. The Review Team will be composed of experienced project management, technical, and fiscal personnel drawn, on an ad-hoc basis, from organizations which will not participate in the implementation of the proposed project. The review will include the specificity of project objectives, the completeness of technical and management definition, the project's technical complexity, cost estimates, contingency/ reserve allowances, schedules, etc. The Program Associate Administrator may choose the proposed projects to be reviewed. However, the intent is that Definition Reviews be made of all major projects, particularly those judged to have high technical complexity.

d) A "Project Initiation Agreement" signed by the appropriate Program Associate Administrator and Center Director(s), should be required before the proposed project is included in NASA's budget submittal. This brief document should outline the project objectives, management interfaces, acquisition strategy, schedules, budgetary levels, and other key groundrules established as a result of the Phase B definition and the "Definition Review." This document will be the baseline for project implementation until a formal Project Plan is approved.

e) A formal, approved Project Plan should be required before implementation funds are provided to the implementing NASA Center by NASA Headquarters. The Project Plan will be the baseline for project implementation.

Recommendation 3:

Selection of contractors should be based primarily on technical considerations, the bidders' management capabilities, management implementation plan for the project, and past performance.

Recommendation 4:

NASA management should establish a policy that NASA Project Offices of all major NASA projects will have adequate visibility of contractor activities and resource expenditures in order to assess progress and problems and to develop the necessary understanding of the status of all project activities. Center Directors should be held responsible for implementation of this policy--both a strong NASA in-house capability and adequate Center resources are required. Utilization of existing management information systems should be encouraged.

Recommendation 5:

After the implementing contractor is selected for a new NASA procurement, the first months of the contract activity should be funded at a low level and be directed at developing an early NASA/contractor understanding of the project's scope and interfaces. This should be completed prior to the commitment of major expenditures, and should include the following:

- Maturing the Phase B baseline design.
- Developing system specifications, including definition of major interfaces.
- Providing a risk assessment and identification of critical technologies.
- Providing detailed implementation plans and work packages.
- Providing detailed cost to complete.

Following this activity, the NASA Project Manager should reconfirm the earlier cost-to-completion estimate and the commitment by the Project Manager to NASA management. If the new cost estimate is significantly above the earlier commitment, the Project Manager should indicate descope options available.

Recommendation 6:

The NASA Project Manager should be relieved of the responsibility for forecasting future inflation rates in estimating project completion costs. NASA should continue the current policy of estimating completion costs for major flight projects requiring long development periods in budget-year dollars. In addition, NASA management should review, with the OMB and the Congress, the possibility of applying this approach to all future NASA projects.

Recommendation 7:

NASA management should establish a policy that all major NASA projects will include adequate reserves. These reserves will be to cover potential program adjustments, defined as "APA," and potential technical and schedule problems, defined as "contingency." The APA should be controlled by the Headquarters Program Manager and the contingency by the Center Project Manager. The level of the reserves will be established prior to the "Definition Review" and modified, following the review, if appropriate. The level of the reserves should be a function of project definition maturity, technical complexity, and the risks associated with concurrent developments of major interfacing systems. Both the APA and the contingency should be re-evaluated after "the early understanding between NASA and the implementing contractor" (Recommendation 5). In addition, projects should include technical and schedule margins, where possible.

Recommendation 8:

As a general practice, NASA should minimize the management interfaces required for the implementation of NASA projects. When there are significant advantages for NASA Centers to team in the conduct of a project, it should be required that the management interfaces be defined prior to Definition (Phase B) and the technical interfaces prior to Implementation (Phase C/D). In addition, one Center should be designated as the Project Management Center and given project authority (including the allocation of R&D resources) over the supporting Center(s). Institutional resources should continue to be controlled directly by NASA Headquarters.

Recommendation 9:

Several NASA Management Instructions that define project management policies should be re-examined, revised as appropriate, and reissued. Examples include those defining the role of the Project Manager (such as GMI 4-1-1) and those providing guidelines for project planning documentation (such as NHB 7121.4). Their reissue will provide further emphasis to NASA management's requirement for the application of sound project management practices.

Summary

The major finding from the Study was that NASA has not always applied sound project management principles, and/or has not always properly used available management tools. This has aggravated the cost growth which is inherent in NASA's projects due to their technical complexity. Therefore, the Study Team's Conclusions and Recommendations stress the need for the continuing application of the basic principles of sound project management by NASA. They also call for the refinement of some existing management tools, and the continuing verification by NASA's top management that the principles are being followed and that available management tools are being fully utilized.

Finally, the Study Team is convinced that NASA should be proud of its overall project management performance during the Agency's 22-year history. On the other hand, we believe that improvement in cost and schedule management is required and can be achieved through implementation of the intent of our Recommendations.

# # # #

National Railroad Passenger Corporation, 400 North Capitol Street, N.W., Washington, D.C. 20001 Telephone (202) 383-3000

Amtrak

May 26, 1982

Honorable William V. Roth, Jr.
Chairman
Governmental Affairs Committee
Washington, DC 20510

Dear Mr. Chairman:

Alan Boyd has requested that I submit a response to your letter of May 6, 1982, requesting information on the status of Amtrak's major acquisition program and asking that we review and provide comments on your proposed bill, S. 2397.

As you know, the National Railroad Passenger Corporation (Amtrak) was established by Congress as a private corporation "to be operated and managed as a for profit corporation...not an agency or establishment of the U. S. Government" (45 U.S.C.501 et seq). Nonetheless, I can assure you that Amtrak has been responsive to the General Accounting Office requirement to provide the annual financial status of our major acquisition program. Attachment #1 contains the responses to the questions you proposed. In the past, our major acquisition program has only included a very limited number of items, mainly locomotives and rail passenger cars. This, coupled with the limited number of vendors in this area, has enabled Amtrak to stay on top of the program without an extensive mechanized system to monitor it.

As you may be aware, the principal problems with our major acquisition program have been the uncertainty as to the annual funding levels of Amtrak's capital program and the limited number of vendors producing the type of items we need. These have limited our use of multi-year procurement and the associated savings that procedure provides. Without knowing how many years or in what quantities production of an item will run, contractors are hesitant to invest in modern capital equipment and to buy components in large economical lots. All of this impacts our capability to adequately project costs for these items.

We have reviewed the proposed bill as you requested and our comments are included in Attachment #2. As I have already indicated, our capital acquisition program is relatively small, and we have been responsive to the issue.

I trust that this information will be useful. Please let me know if I may be of further assistance.

Sincerely,

James H. English
Vice President
Government Affairs

Enclosure

JHE/FEW/faa

Attachment #1

MECHANICAL PASSENGER CONTROL SYSTEM

Question #1: The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981: because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

Amtrak Response: Cost information is stored and catalogued in a mechanized property control system which is updated monthly. This system is utilized to provide management control data and cost reports to the Board of Directors and the Federal Railroad Administration (FRA). Information concerning scheduling and performance is maintained manually. The number of items controlled is not sufficient to warrant a mechanized control system.

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Question #2: Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

Amtrak Response: Amtrak maintains a central source of cost data (mechanized data base) relating to major acquisitions at Corporate Headquarters. Scheduling and performance data is also centralized at Corporate Headquarters but is maintained manually. As previously mentioned, the number of items controlled is not sufficient to warrant development of a mechanized system.

Question #3: How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, type of data, specifically, was your agency unable to provide and why?

Amtrak Response: The Amtrak response for the FY 1981 report was provided to GAO slightly over 2 months after their intitial request. The request was received on August 21, 1981 and the response was dated November 2, 1981. The FY 1981 report requested a considerable amount of additional data which was not included in previous reports. Amtrak was able to provide all applicable data.

Question #4: The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

Amtrak Response: The cost growth of the major acquisitions is not considered to be excessive. Inflation and changes in the scope of requirement, usually for the benefit and comfort of passengers, are the major causes of cost growth experienced by Amtrak. The procurement documents include provisions to control escalating labor costs, which are a major portion of the contract costs. The escalation clause is tied to the production schedule and the contractor absorbs all labor cost exceeding the conditions of the clause. Excluding inflation and changes in scope, late receipt of material, which is usually reimbursed at cost, is the element which accounts for most of the escalation cost in Amtrak accounts.

Question #5: Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

Amtrak Response: The most significant action in the past two years has been the exercise of strict control over changes in scope of work. The controls have been effective and the cost growth for both locomotives and cars has actually been lower than anticipated.

Question #6: How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?

Amtrak Response: Amtrak's major acquisition projects are funded mainly through annual appropriation bills. Funds appropriated for capital acquisitions are authorized to remain available until expended.

Question #7: How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

Amtrak Response: Amtrak provides Congress through the Appropriations Committee on an annual basis specific information on the expenditures of appropriated capital funds and outlines a capital program for future expenditures. Amtrak is also required by law to submit to Congress and the President, no later than February 15, an annual report including "a comphrehensive and detailed report of its operations activities, and accomplishments." We also provide replies to congressional requests on the status of specific items being procured. Amtrak provides a monthly Capital Program Status Report to its Board of Directors and the Department of Transportation.

Question #8. What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

Amtrak Response: The oversight agency should be the same agency receiving the current information on the status of major acquisitions whether it be GAO or the Office of Management and Budget (OMB). The proposed bill has a number of legal implications, especially the provision which prohibits the obligation or expenditure of additional funds after OMB notifies the Congress of its determination that the project will exceed the criteria. Any delay in authorizing legislation could further escalate the cost or cause termination or penalty payments on the part of the agency.

Attachment #2

COMMENTS ON DRAFT SENATE BILL S. 2397

(Proposed by Congressman Roth)

(1) The 25 percentum or more which is proposed as the criteria for reporting should be qualified to exclude inflationary impact which was not included in the initial estimate for an item. The agencies have no control in this area and the inflation estimates for out years are usually prescribed or a recognized public rating guide is used. (The proposed bill does provide for the Office of Management and Budget to disregard inflation in its review of the major acquisitions.)

(2) Section 2, which appears to be the heart of the bill, requires the agencies and departments to provide quarterly reports. It is recommended that this requirement be changed to annual reporting. The major capital acquisition program is a long-term program with major procurement taking place over a number of years. Most changes do not take place on a quarterly basis. In addition, most of the funding is on an annual basis and the funding levels do not change significantly during the year.

(3) If the overall reporting is not changed to an annual basis, those agencies and departments with very limited capital programs, such as Amtrak, should be exempt from quarterly reporting. Our program has only included 4 or 5 reportable items and in most cases the same items were being procured from year to year.

99-849 O - 82 - 17

NATIONAL SCIENCE FOUNDATION
WASHINGTON D C 20550

July 1, 1982

OFFICE OF THE
DIRECTOR

Honorable William V. Roth, Jr.
Chairman, Committee on
Government Affairs
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

This is in response to your letter of May 6, 1982, expressing your concern over the control of costs and schedules associated with major acquisitions and requesting that the National Science Foundation respond to your questions, and comment on S. 2397.

The Foundation obligates most of its funds in the form of grants for research in various fields of science and engineering. We fund very few projects costing in excess of $50 million dollars. Those funded at that level are clearly identified in the Foundation's annual budget submission to the Congress and are extensively documented and justified to several authorization and appropriations committees. We are pleased to point out that the most costly NSF acquisition of the past few years, the $78.2 million Very Large Array Radiotelescope in New Mexico, was completed essentially on schedule and within two percent of the baseline estimate made several years earlier. (GAO report MASAD-82-24, April 22, 1982, Appendix I, Page 60.)

In specific answer to your questions:

1. Because NSF funds very few projects meeting the definition of "major acquisition," we see no need for a formal system at the Foundation that would catalogue information on them. The managers of the program undertaking the project are clearly and directly responsible for keeping top management informed about costs, scheduling and performance. In addition, program analysts in the Director's Office are responsible for monitoring the progress of any such projects, beginning with the initial planning stage through final project completion. In the past, large acquisitions have, by their rarity, been subject to a high degree of management attention.

2. We maintain no central source of data concerning these projects and, again, because of the very few projects involved and the prominence of such projects in the Foundation's budgetary and

program review process, we see no need to maintain such a central source. The Foundation does not maintain field operations and all information on projects is readily available at its headquarters.

3. The Foundation's Budget Officer, who is responsible for responding to the GAO request for data used in its report, had no difficulty in providing the requested data. The information was provided on time and consisted of reporting the completion of the one current project meeting the definition of "major acquisition."

4. The one project on which the Foundation reported in the most recent report was completed within the planned budget and schedule and did not incur excessive cost growth.

5. Because of the few projects involved and the experience of the most recent project, no actions specifically designed to curb cost growth have been taken or appear to be necessary.

6. Major acquisitions are funded through annual appropriation bills for each fiscal year, which usually include the estimated amount for that year; actual expenditure may occur several years after initial obligation.

7. Congress is informed about the status of major acquisitions through the budget request for initial approval and funding of the project. Because the number of such projects are few and their cost very large, relative to the total funding of the overall program which contains them, they receive high visibility in the budget request. The Foundation Director and other officials justify the budget request before the congressional committees. Additional information is often provided for the record and in response to congressional staff inquiries. In each subsequent budget for which incremental funding is requested, additional information and review of progress is provided.

Congressional subcommittees receiving information through this process are:

- The Senate Appropriations Subcommittee on Department of Housing and Urban Development and Certain Independent Agencies
- The House Appropriations Subcommittee on the Department of Housing and Urban Development-Independent Agencies
- The Senate Committee on Labor and Human Resources
- The Subcommittee on Science, Research and Technology of the House Committee on Science and Technology.

Honorable William V. Roth, Jr.

- The Subcommittee on Science, Technology and Space of the Senate Committee on Commerce, Science and Transportation.

No other formal or periodic reporting is made.

8. Based on the Foundation's past experience and current plans, the provisions of S. 2397 would have limited application to the National Science Foundation. Therefore, we defer to the views of the Office of Management and Budget and other agencies that have a larger number of major acquisitions.

If any additional information is required, please let me know.

Sincerely yours,

John B. Slaughter
Director

TENNESSEE VALLEY AUTHORITY

JUN - 4 1982

The Honorable William V. Roth, Jr.
Chairman
Governmental Affairs Committee
The United States Senate
Washington, DC 20510

Dear Mr. Chairman:

We are pleased to respond to your April 27 request for our views on S. 2397 and the level of regulatory- and paperwork-related impacts it may have on our own activities and to your May 6 request for our responses to eight questions on management of project costs. Our responses to these questions are set forth in an enclosure.

We fully agree with the position expressed in your April 19 introductory remarks on S. 2397 that adequate steps ought to be taken to assure that serious cost overrun problems on Federal projects and procurements are brought under control before too many of the taxpayers' dollars are wasted. However, we believe that the provisions of subsections 3(b) and (c), which would suspend the authority of an agency to make expenditures on projects determined to have cost overruns of 25 percent or more, might actually further increase the costs of such projects by virtue of the inevitable delays associated with annual reauthorizations. If construed to apply to TVA's self-financing electric power program, which receives no appropriations, the bill could create significant problems in assuring that the power program is operated in a cost-effective manner. When Congress placed the TVA power program on a self-financing basis in 1959, it specifically determined that the power program could not operate efficiently if it were subject to annual approval by Congress.

A complete regular annual oversight process for addressing the problems of cost overruns already exists. The appropriations committees of both the House and Senate have the capability to oversee the cost growth of Federal projects and procurements. If the cost growth for a given project is unacceptable, then these committees and their respective Houses may implement the simple solution of refusing to provide additional appropriations for the project. To the extent that some type of additional reporting requirements on cost overruns is appropriate, we believe that such reports should be provided to these committees for their use in determining whether action ought to be taken.

We doubt, however, that the additional administrative costs incurred by Federal agencies, the Office of Management and Budget, and congressional committee staffs in preparing and handling the paperwork associated with such added reporting requirements would be offset by any savings that might be realized through the new procedures. At least in TVA's case, information

on changes in the estimated costs of major projects is already routinely provided to the House and Senate Appropriations Committees as part of its annual budget submissions.

While the provisions of S. 2397 would not appear to apply to the TVA power program, it is possible that some may consider it to be applicable by construing TVA power funds to be "Federal funds" for the bill's purposes. Because of the TVA power program's self-financing nature, Congress has generally not considered TVA power funds to be "federal funds" or "government funds." For example, in its report on the "Sunset Act of 1980" (S. 2) during the 96th Congress, the Committee on Governmental Affairs specifically stated that TVA power program funds were not "government funds." In this case, there are also good reasons why the TVA power program should not be covered by this legislation.

Even though TVA's self-financing power program (which accounts for over 95 percent of TVA's annual expenditures) does not receive appropriations and its bonds are by law neither obligations of nor guaranteed by the United States, its budget is submitted to Congress each year for informational purposes. Information is presented on the status of the power program's current activities and the estimated expenditures for the upcoming fiscal year, including information on cost growth associated with major projects. In this manner, Congress is able to oversee the TVA power program without disrupting its planning and construction activities. In most respects, therefore, added reporting requirements for TVA would be unnecessarily duplicative.

Moreover, the provisions of subsections 3(b) and (c) of S. 2397, which suspend agency authority to make expenditures, would be ill suited for activities such as the TVA power program. When the TVA power program was placed on a self-financing basis in 1959, Congress determined that the power system (currently the Nation's largest) could not effectively meet the long-term electric power needs of the Tennessee Valley region if its construction program and other activities required annual approval by Congress. In this regard, the procedures provided under S. 2397 could subject the TVA power program to greater restrictions than have ever been placed on it in its history, even though not one penny of appropriations would be involved, and could seriously impair the ability of the TVA Board to meet its responsibilities under the TVA Act.

The ability of TVA or any other electric system to accurately project the ultimate cost of constructing a large electric generating facility is very restricted. This is particularly true for the construction of nuclear plants where the more than 10 years of planning and construction, changes in the regulations of the Nuclear Regulatory Commission, and the availability of new safety measures can result in significant increases in project costs. We do not believe that it is appropriate for a decision to install additional safety measures at a nuclear plant to require cessation

of work and reauthorization of that plant. This would certainly be a disincentive to safety. Similarly, environmental factors, such as the unforeseen presence of an endangered species or possibility of a water quality problem, might lead to delays and project modifications and, therefore, unanticipated costs. In such situations, an agency could conceivably be foreclosed from making mitigation-related project expenditures until Congress approved continuation of the project.

We believe a better solution to enhancing Congress' awareness of the occurrence and level of cost overruns would be to expand the information submitted to Congress in the existing congressional budgetary and appropriations processes, rather than creating a separate set of new reporting and procedural requirements. OMB already has the general authority to require agencies to provide such types of information to Congress in their annual budgetary submissions.

The Office of Management and Budget advises that it has no objection to the submission of this report from the standpoint of the Administration's program.

Sincerely,

C. H. Dean, Jr.
Chairman

WRG:CAP
Enclosure

cc (Enclosure):
S. David Freeman
Richard M. Freeman
W. F. Willis
H. S. Sanger, Jr., E11B33 C-K
C. Bonine, Jr., E4B30 C-K
C. H. Crowell, E12A4 C-K
L. H. Edwards, E6C7 C-K
K. E. Gray, Washington
H. G. Parris, 500A CST2-C

Question 1: The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

Answer: TVA's Office of Engineering Design and Construction (OEDC) has the primary responsibility for the design and construction of all permanent structures and permanent engineering works which are authorized to be built in accordance with the requirements determined by the TVA organization having program responsibilities for such structures and works. Included in OEDC's responsibilities are the responsibility for coordination of planning and scheduling; the preparation and revisions of capital cost estimates and cost studies; the preparation and coordination of financial plans, budgets, and related material; and implementation of cost control methods.

For all major projects OEDC utilizes a computerized project control system for schedule and labor performance monitoring, which has the capability to produce a completely integrated engineering, procurement, and construction Critical Path Method (CPM) schedule for each project. Several systems development programs are utilized to enhance and support the present project control effort, including the identification of and causes for variances. This variance identification facilitates the monitoring of progress and performance trends across various time spans.

TVA's Division of Finance has the primary responsibility for keeping the official accounting records. Through the use of a computer-based system, all costs are collected on a TVA organizational and project and/or program basis.

Question 2: Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

Answer: TVA's Office of Engineering Design and Construction is the central source of data collection for major acquisitions; however, much of the information regarding the specific details on these major acquisitions is decentralized within other TVA organizations according to their program responsibilities.

Question 3: How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

Answer: TVA received GAO's request for information on August 26, 1981. Since GAO's request was for information through the end of fiscal year 1981, certain data necessary for TVA's response was not available until after September 30, 1981. Moreover, previous GAO requests for the "Status of Major Acquisitions" over the past several years had been consistent from year to year as to the kind of data required. For fiscal year 1981, however, GAO's request included an "Addendum to Data Request," which requested significant amounts of information on projects going back numerous years. This data took additional time to gather, and TVA's final response was not transmitted to GAO until January 5, 1982.

Despite the unforeseen request for additional information, TVA was able to supply nearly all the data requested by GAO. Some data requested in the addendum, specifically the specific date (month/year) of every change in various categorized cost and schedule areas, was not supplied, however. For some TVA construction projects, responding to this request would have required the isolation and identification of a myriad of such changes occurring over periods in excess of ten years. The rapidly changing conditions (unprecedented inflation, voluminous regulatory changes, and modifications based upon environmental considerations) which have affected TVA's construction program during this period by lengthening construction schedules and increasing construction costs have caused frequent and repeated increases in many or all of the categories requested by GAO. Given the magnitude of the frequency of such changes and the enormous size and complexity of TVA's construction program, the assignment of specific dates for each individual change would have been impracticable if not impossible.

Question 4: The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

Answer: At the outset, it should be noted that the baseline estimates for TVA's projects reported to GAO were TVA's original cost estimates, most of which are well over 10 years old. The effects of inflation, interest rate increases, and schedule slippages over this extended period of time caused by factors over which TVA has no control are responsible for a substantial portion of the cost growth reported by GAO. TVA has experienced significantly large increases in its cost estimates for power program capital projects in recent years. The increases were incurred almost exclusively in TVA's large nuclear power plant construction program and reflect a trend that is being endured by practically every electric system in the Nation engaged in nuclear plant construction.

Induced principally by new and more restrictive regulatory requirements, the cost increases have been mounting continually since TVA's nuclear projects were begun. New and unanticipated nuclear regulations always have been a significant factor for cost increases since the early years of TVA's nuclear construction program. The Three Mile Island accident in March 1979 increased emphasis on the safety of nuclear generating facilities, and new regulations issued after that have increased dramatically the cost of TVA's nuclear program. Major process modifications and additional monitoring capabilities have added additional scope to the plants, thereby increasing estimates.

Since many of TVA's plants were well along in construction at the time of the TMI accident, these scope additions forced lengthy schedule slippages. A schedule slippage by itself forces large cost estimate increases for fixed overheads. A nuclear project employs 3,000-4,000 persons and the fixed overhead charge for craft supervision, shops, cleanup, warehouse operation, etc., is a large part of project cost.

The last major cost increase factor reflects the national economic situation. Throughout the last 7-10 years TVA has made large expenditures for nuclear plant material and equipment and for highly paid, skilled craftsmen. The inflation rate during this period was consistently higher than anticipated and consequently generated large increases in material and labor costs. Although the last few months have seen a dramatic drop in the inflation rate, TVA's long-term economic forecasts still predict an upward trend.

In short, TVA recognizes that the cost increases incurred in its nuclear program have been large in recent years. However, the cost trends are similar to those being experienced by the electric utility industry as a whole and TVA does not consider its own cost increases excessive from a relative standpoint.

Question 5: Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

Answer: As noted in the answer to question No. 4, the cost increases that TVA has incurred in recent years for capital acquisitions are associated almost entirely with TVA's major involvement in nuclear power plant construction.

These cost increase trends have been addressed by TVA management for many years, but the magnitude of recent changes has prompted the implementation of several new cost management efforts. About two years ago, TVA introduced a new, annual, corporate planning system that aids management in setting corporate cost performance and capital expenditure goals for the upcoming fiscal year. An annual Operating Plan is prepared by TVA's major organizations and approved or amended by the Board of Directors prior to the beginning of each new fiscal year. Thereafter, monthly Program Summary

Reports that compare actual with planned performance are reviewed by the Board.

The Operating Plan concept also incorporates a performance measurement system that focuses on responsibility centers rather than on traditional individual project centers. The system forces management, at all levels, to be cognizant of their department's expenditure limitations and places the responsibility for cost control on the individuals who really do have the potential to control costs. To provide project estimates that somehow factor in anticipated future regulatory changes, a new concept of estimating was recently introduced. Under this concept, a statistically derived allowance for future scope changes is calculated and periodically reviewed. TVA's estimates for nuclear power projects now all include this allowance and should, in the future, be less susceptible to change.

TVA management has also recently developed a procedure under which any plans for new construction work undergo a cost analysis to determine if the work should be done in-house or by contract. This new procedure will assure that TVA power plant additions and modifications are being performed in the most cost efficient manner.

To ensure that TVA managers take appropriate steps to satisfactorily respond to the results of these various performance measurement procedures, TVA's Audit Review Group monitors followup actions and progress. The Audit Review Group is composed of high-level TVA officials whose "nonline" positions enable them to evaluate followup actions objectively.

Each of these actions has been well received by TVA's management. The individual actions support the new cost management philosophy which pervades the corporation, and TVA believes their implementation is proceeding well.

Question 6: How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?

Answer: Since 1959, the TVA power program, which accounts for over 90 percent of the funds expended on TVA's major acquisition projects annually, has been on a self-financing basis, supported solely by the ratepayers of the Tennessee Valley region. It receives no appropriations. TVA's power program finances all of its operating expenses and a portion of its construction costs from power revenues.

Section 15d of the TVA Act authorizes TVA to issue and sell its own bonds (up to $30 billion outstanding at any given time) to finance the construction of power facilities. Principal and interest on borrowings are by law neither obligations of nor guaranteed by the United States and are solely the responsibility of TVA's ratepayers. The funds available to TVA in conjunction

with its power program are not subject to fiscal year limitations and are to be used by TVA, through the exercise of its best business judgment, to operate the power program in a cost-effective manner.

The remainder of TVA's major acquisitions, such as locks, multi-purpose dams, flood control facilities, and fertilizer facilities, are financed from appropriations. Such appropriations are provided annually to TVA through the congressional appropriations process and, historically, have been made available to TVA by Congress "until expended."

Question 7: How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

Answer: TVA supplies information to Congress each year on the status of its major acquisitions through two separate documents. As prescribed in section 9(a) of the TVA Act, "The board shall file with the President and with the Congress, in March of each year, a financial statement and a complete report as to the business of the Corporation covering the preceding governmental fiscal year . . . ." TVA prepares this report every year, and copies of it are sent to the President, Congress, and other interested individuals.

Another means of communication is through the submission of TVA's annual budget plan as part of the President's Budget, which is usually transmitted to Congress in January of each year. This document contains budget estimates for three years and completion dates and cost information for all major TVA construction activities. Also included are total cost estimate changes from the previous year's President's Budget submission.

Question 8: What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

Answer: Our response to this question is set forth in the text of our letter.

Office of the
Administrator
of Veterans Affairs

Washington, D.C. 20420

Veterans
Administration

NOVEMBER 24 1982

Honorable William V. Roth, Jr.
Chairman, Committee on
Governmental Affairs
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

I am pleased to respond to your request dated May 6, 1982, for the comments of the Veterans Administration on S. 2397, the Cost Reduction in Major Procurements Act, and for responses to certain questions to assist your Committee in reviewing and considering S. 2397.

S. 2397 would require enactment of special legislation to continue the expenditure or obligation of funds on any major civil acquisition initiated after January 1, 1982, whenever the cost of the acquisition has increased or is estimated to increase over the initial estimate by 25 percent or more. It would also require the reporting of status information on all major civil acquisitions.

As I have indicated in the enclosed responses to your questions, the Veterans Administration believes S. 2397 is unnecessary with respect to controlling major acquisition costs in the VA and would only impose an additional reporting requirement on this Agency. Sections 5001-5015 of title 38, United States Code, impose on the VA a more stringent requirement regarding cost increases than would S. 2397. At present the relevant Congressional oversight committees authorize projects at a specified cost and if that cost increases by 10 percent or more, an additional authorization by the committees must be obtained.

Furthermore, the VA does not have discretionary funding to cover the kind of cost growth this bill addresses. The VA must now approach the Appropriations Committees to reprogram funding in excess of $250,000. To cover a cost increase of 25 percent on a $50 million project would require the VA to seek an additional appropriation by Congress.

We are advised by the Office of Management and Budget that there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely,

ROBERT P. NIMMO
Administrator

Enclosure

RESPONSES TO QUESTIONS IN SENATOR
ROTH'S LETTER OF MAY 6, 1982

1.) The General Accounting Office had some difficulty in preparing its recent report "Status of Major Acquisitions as of September 30, 1981" because many of the agencies were unable to readily develop and submit the information requested by the GAO. How is information concerning cost, scheduling and performance of major acquisitions stored and catalogued by your agency?

Cost, scheduling and cryptic performance information is available from automated systems. Detailed performance information requires analysis of project records.

2.) Does your agency maintain a central source of data related to major acquisitions or is such information kept in various forms throughout the agency's headquarters and field operations?

Information is generally available within one department or staff office on any given major acquisition.

3.) How many months after the initial GAO request for data to be used in the "Status of Major Acquisitions" report did your agency respond to the request in its entirety? Was your agency unable to provide some data to the GAO? If so, what type of data, specifically, was your agency unable to provide and why?

The data was furnished within the allotted time of three months.

4.) The cost growth for major acquisition projects in many of the agencies has been substantial over the last few years, as the GAO report points out. Do you consider the cost growth in your agency's projects to be excessive? What are the specific reasons of the cost growth your agency's projects have experienced?

If the GAO report is taken at face value, we consider cost growth to be excessive. However, the VA has had great difficulty agreeing with GAO on appropriate baselines. Some of the covered projects were introduced into the budget process many years ago, with scope and intent (inflation aside) very unlike the projects ultimately acquired.

5.) Has your agency taken any actions specifically designed to curb the cost growth identified by the GAO in the past two years? What are these actions and how well have they been implemented?

The VA began implementation of the Advance Planning Fund (APF) process in FY 1978. So far there is only one reported acquisition under this process. With the advent of this process it appears that the VA will be nullifying non-inflationary cost growth. The key factor in controlling costs is the performance of sufficient study, development, and preliminary design to properly scope and estimate acquisition costs before entering the budget process and establishing the initial baseline. The VA has also implemented procedures for restricting purchasing at the end of each fiscal year using excess funds.

6.) How are your agency's major acquisition projects funded? Through annual appropriations bills? Are funds available to your agency for major acquisitions all spent in later years as well?

Most major VA acquisitions have been funded for design in one year and construction in a subsequent year. These appropriations have been designated "no year" money which is available until expended. However, ADP procurements have been funded annually and must be funded in each year that expenditures are made.

7.) How does your agency currently inform Congress about the status of its major acquisitions? Please be specific and identify the reports and which offices receive them. Indicate as well the frequency of such reports.

Both the yearly authorization and appropriation processes, with formal submissions, inform Congress of acquisition status as required by Veterans Affairs and HUD/Independent Agencies Committees, respectively, in both Houses of Congress. Also staffs of these committees receive monthly Management Information System (MIS) updates, giving status information on all acquisitions.

8.) What are your views on S. 2397? Do you believe the Office of Management and Budget is the proper oversight agency for the process authorized under S. 2397?

With respect to the need for S. 2397 for controlling major acquisition cost in the VA, we oppose the bill. The VA is already under a more stringent reporting requirement. Under the provisions of 38 U.S.C. §§ 5001-5015, any time costs of major acquisitions increase by more than 10 percent, additional authorization must be obtained from the VA's Congressional oversight committees. If S. 2397 becomes law, we believe OMB would be the proper oversight agency.

○